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1X. A Description of the Australian Birds in the Collection of the Linnean Society; with an Attempt at arranging them according to their natural Affinities. By N. A. Vigors, Esq., M.A., F.R.S., F.L.S., and F.G.S.; and Thomas Horsfield, M.D., F.L.S., and F.G.S. Communicated by the Zoological Club of the Linnean Society.

Read June 21, 1825; and January 17, 1826.

 $I_N$  submitting to the Linnean Society the following observations on the Ornithology of New Holland, which have been founded upon an examination of the birds contained in their valuable collection, we presume that little explanation, much less apology, is necessary for the mode in which our researches have been conducted. The mode, we need scarcely premise, accords with those principles which have been introduced into zoology by one of the most distinguished naturalists of this Society, and is founded upon the affinities and analogies of the groups of the animal world, with the view of ascertaining their station in nature.

In regulating our researches according to these principles, we have found it necessary to make some partial alterations in the nomenclature which has been generally adopted in this country, until lately, for the groups of ornithology. And in introducing this modification of the scientific terms of Linnæus, we feel some apprehensions that we may be supposed to deviate from those principles of our great master, which the naturalists of this country

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try have so long and so justly followed. But nothing can be more unfounded than such a supposition. Devoted as our leading zoologists have hitherto been to Linnæus, they have not evinced a more sincere attachment to his precepts than the authors of the following Catalogue. In point of fact, the apparent deviation from the "Systema Natura," in our attempt to arrange the ornithology of New Holland, and in similar undertakings of the present day, will be found, when strictly investigated, to be more in word than in reality. It would be superfluous to call to the recollection of the Society how important has been the increase of knowledge in every branch of natural history since the days of Linnæus. That increase, in the particular department upon which we have entered, rendering the subjects even now above five times more extensive than when that pre-eminent naturalist undertook to arrange them, has raised his subordinate groups into groups of a considerably higher value than they originally possessed. Those divisions which he instituted as the next superior groups to species, and which he denominated genera, have swelled out by the vast accumulation of species and the endless variety of new forms comprised in them, into what are now considered families, or into assemblages of even still more extensive signification. In such a change of materials, a corresponding change in their denominations appears essentially necessary : the groups, which were once termed genera, require a more comprehensive title; and the before-unnoticed modifications of form that spring up and constitute subordinate groups among them take the place which they have left, and, assuming the rank, demand the name, of genera. Such, in fact, is the natural course of our science ; and such will ever be its progress, while information continues to increase.

On our turning to the examination, however, of the original groups of Linnæus, limited as they confessedly were in his days

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as to the number of species, still we must observe that they appear to us, when judiciously modified and faithfully interpreted, not merely to embrace all the later acquisitions of science, and to include them within the bounds prescribed by their natural affinities, but to evince an almost intuitive insight on the part of that great master into the laws of nature. We have been accustomed, indeed, to contemplate with astonishment the expansiveness of those views with which he anticipated the modifications of form which have been brought to light by succeeding researches, and provided a station for them in his system suited to their place in nature. In but few instances have we seen cause to object to those leading views; and a slight modification will stamp even these few instances as of equal value with the rest. On the other hand, we are free to confess that among the various systems of ornithology which have arisen professedly to supersede his principles of arrangement, we see everywhere what appears to us to be an unfaithful representation of nature. When we adhere, then, to the principles of Linnæus, and to those grand and leading divisions which he has portioned out for our instruction, although with a modification of the terms of his nomenclature,-a modification which the fleeting nature of nomenclature itself renders necessary, and to which the scientific language of our own days must submit in its turn,--we conceive that we pay the most genuine homage to his genius and reputation. Were we, on the other hand, to adhere strictly to his nomenclature, and endeavour to square it to the gigantic mass of materials that is progressively increasing upon us, we consider that we should endanger his reputation by exposing the inadequacy of his system to any practical purposes, and thus prove ourselves by ill-judged adulation to be the mere lipworshippers of his name.

It is thus, by adhering to the general views of Linnæus, but partially

partially remodelling the terms of his nomenclature, that we conceive ourselves strictly to derive our principles from him. We are willing to go even so much further as to assert that those naturalists, who in the present advanced state of science would have us bind ourselves exclusively to his nomenclature, virtually run counter to the spirit of his precepts. Had he left us only what he called his "System," this fact might not appear so evident. But he has left us what is even of more value, if possible,—his opinion of that system, and of its insufficiency for any purpose but to meet the limited knowledge of his age. He pointed out\* to us how far it was a mere outline of the material world, to be filled up as increasing information would furnish the details,—how far it was a mere substitute for that more ample view of nature, of which succeeding ages might hope to obtain a glimpse. He saw, in fact, the promised land

\* We allude to those sketches of the vegetable kingdom, which, with the modesty always attendant on true genius and information, Linnæus styled " Fragments of a Natural Method." In these the first glimpse is given of that improved mode of symbolical representation by which we may hope, as knowledge increases, to communicate with some degree of accuracy our ideas respecting the groups of nature. The deficiency perceptible in these "Fragments" is expressly stated to have originated in the deficiency of materials, which more extensive knowledge would serve to supply ;--- " defectus nondum delectorum in causa fuit quod methodus naturalis deficiat, quam plurium cognitio perficiet; natura enim non facit saltus." (Phil. Bot.) We cannot give a more just description of the genuine merits of Linnæus with respect to his views of arrangement, than by transcribing the words of the author of the "Hora" Entomologica," who, after stating that "he honours the memory of that great man," not on account of "his precision of description," nor of "his learning in synonyms," nor of " his having been a happy inventor of words," asserts, " that his glory is built on much more stable foundations: for the man who first pointed out the distinction between the natural method and an artificial system; who first perceived the impossibility of giving either accurate definitions or characters to natural groups; and who first remarked the existence of intermediate genera between natural orders, must always be considered as one of the principal founders of our knowledge with respect to the natural system, whensoever this shall appear."-Hora Ent. Pref. p. xx.

before

before him; and he equally saw, that the limits allotted to the life and the labours of man did not permit himself to enter it. But he lived sufficiently long to conduct the followers of nature to the Pisgah of science, and to show them, in his prophetic admonitions, the abundance of the territory which lay within their reach, and the paths through which they might hope to occupy that land of promise. It is not, we conceive, too presumptuous to affirm\*, that he would himself have followed the same paths which we are now all pursuing in conformity with his instructions, had he lived to accompany and regulate our movements.

Were there to exist, however, a case in which it would be allowable for a disciple of Linnæus to depart not only from his mode of nomenclature, but even from his general principles, that case is now before us. The subjects which we have attempted to arrange come from a country scarcely more than the name of which was known in the days of Linnæus. And it is to be recollected, that in the variety and novelty of the forms of its animal productions, that country presents an almost totally insulated character. Among the number of birds which are now in the Society's museum, and which are daily increasing our Australian collections, not much above ten, certainly not twenty, species could have come under the inspection of Linnæus; and these are species merely which are common to the islands of the

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Indian ocean, or which, according to the varied laws that regulate the geographical distribution of the groups of ornithology, are scattered almost indiscriminately over the globe. Bevond these few instances, not only every species is new, but almost every form is distinct from those which were familiar to Europeans half a century ago. For such productions consequently no generic names or minuter characters are to be found in the works of Linnæus. And when we consider the totally new and apparently anomalous peculiarities of these productions, it would not be altogether unreasonable to suppose that no place could be found, even in the greater divisions of his general system, where they might be assembled according to their natural affinities. But this is far from being the case. His mode of interpreting the general laws of nature was so penetrating, and at the same time so comprehensive, that provision is made in his primary and leading divisions even for these novelties and apparent anomalies. In including them, therefore, within the pale of his system, merely by partially modifying and liberally interpreting it, -and interpreting it solely according to his own instructions,-instead of making the arrangement which includes these productions a large and unsightly excrescence of that system, or a distinct, nay, a contradictory appendix to it, we consider that we not merely do justice to the comprehensiveness of his views, but confine ourselves within the strict principles of the school which looks up to him as its founder.

We feel much gratification in being able to state, that since we commenced our examination of the birds in the Society's collection, we have had the good fortune to obtain some valuable information respecting the habits and internal structure of many of the species; and we may add, that we have a few important facts in natural history to communicate, and several extensive and strongly characterized groups to exhibit for the first time with

with their distinguishing peculiarities, which we conceive will prove of interest to the Society. We are indebted for much of this valuable information to Mr. Caley, who collected the greater part of the New Holland birds belonging to the Society; and who kindly allowed us to make use of his original notes on these birds, written during his residence in the colony. We have also to express a similar acknowledgement to Mr. Brown, who, in his general zeal for science, did not neglect the interests of zoology while devoting himself to the advancement of his favourite study. To his liberality the Society is indebted for many of its choicest treasures; and the kindness with which he has communicated his information respecting them enhances their value.

Still we have to regret that we are but imperfectly acquainted with a considerable number of the more important forms in the collection, either as to their manners or their internal anatomy; and that many of our observations on them must necessarily be founded on conjecture. Great imperfection may consequently be expected in our details. A favourable prospect, however, opens to us of having our deficiencies supplied on many of these points; but a prospect, which we scarcely know whether we should most rejoice in or lament. The removal of the late Secretary of this Society to an important official situation in the country whose ornithology we are about to investigate, encourages us to hope for much valuable assistance to our labours; while at the same time we cannot avoid regretting his temporary absence from a Society, which is bound to him by every tie of respect and gratitude. But the evils attendant on separation will be softened down on both sides by the continued intercourse which science thus fortunately holds out between us; and we shall be the less estranged, in being still participators in his eminent zeal for our common pursuit. We hope we do not travel

travel out of the line of our duty,---while investigating a collection, which has already received, and which it is expected will continue to receive, so much benefit from Mr. MacLeay,--when we express our sincere wishes for a successful accomplishment of the objects of his mission, and a happy return to his country and this Society.

#### Ordo I. RAPTORES. Ill.

#### Fam. VULTURIDÆ.

The first order which meets our attention, as the first division of the Typical Group in Ornithology, is the Raptorial Order, or the Birds of Prey. Of these birds, again, the first subdivision that comes before us, as being the first department of the Typical Group of that order, is the family of Vulturidæ. Of this family the Society's collection possesses no specimen; nor have we as yet seen any species of it from New Holland. Dr. Latham, however, describes two species as natives of that country : but we have much doubt whether they will be found to appertain to the Vultures. One of these, his New Holland Vulture, seems to have a weak, straight, and elongated bill, with long and slender tarsi; and, as far at least as can be judged from a figure, bears a greater resemblance to a Wading Bird than to a Bird of Prey. The second species, the Vultur audax of the "Index Ornithologicus," which its distinguished author seems not to have described from his own observation, but from hearsay, as he states its size to be uncertain, does not appear to possess any characters in common with the Vultures, except a partial absence of feathers on the cheeks. From the account of its manners also, which are described as bold and courageous, so much so as to induce it to attack the natives themselves,-a circumstance, indeed, from whence it has derived its specific name,-we can scarcely feel inclined VOL. XV. 2 A

inclined to assign it a place among the proverbially slothful and cowardly Vulturidæ. The nearest approach to the characters of that family that has come under our observation among the birds of Australia is in the genus Polyborus of M. Vieillot, the partially naked cheeks of which are allied to those of the Vultures. That genus, however, possesses so many characters in common with the Falconida, particularly with the Fishing Eagles, that it is generally ranked in that family, but at that extremity of it which meets the family now before us. This genus Polyborus is said to assume much of the manners of the Vultures, and may perhaps be considered as in some degree to supply their place in Australia. But on this and similar points we do not at present wish to hazard an opinion. Conjecture may be allowed in some measure to supply the place of facts, when facts are incapable of being ascertained: but with so early a prospect of having our doubts cleared up upon every subject relating to the zoology of New Holland, it is perhaps more prudent merely to express them.

## Fam. FALCONIDÆ.

In this family there are many species and many forms in the Australian Fauna. The forms, however, are such as are common to every other part of the world, with the exception of the genus *Polyborus*, to which we have just alluded, and which is confined to southern latitudes, although widely distributed as to its longitudinal extent. We may generally observe with respect to the groups of the *Falconidæ*, that they know no bounds as to their geographical distribution. Preying indiscriminately upon all species of the inferior animals, and not being confined, like many other tribes of birds, to a particular or a local food, the different forms that compose the family may readily be conceived to be dispersed all over the globe. Their powers of flight,

flight, moreover, are so great, that we need not be surprised at finding that even the same species will sometimes spread itself over the most distant regions. Such at least appears to be the fact, whatever may be the causes which produce it. An analogous fact is observable in the Grallatorial order, where the same considerations, added to the habits of migration common to the order, may probably account for a similar law of distribution. Among the Natatores also we may expect that the extensive powers of locomotion found in some of the groups of the order, suited as well to the water as to the air, may tend to their wide dispersion. A few instances consequently occur of an accordance between the birds we are about to describe, and some of the forms of the above-mentioned groups which are familiar to Europeans. But by far the greater portion of the groups of New Holland will be observed to exhibit peculiarities confined to their own neighbourhood.

#### Subfam. ACCIPITRINA.

#### Genus. ASTUR. Bechst. et Auct.

# 1. NOVÆ HOLLANDIÆ\*. Ast. albus, rostro nigro, cerâ, orbitis, pedibusque flavis.

#### Falco

\* Were we to follow a practice which has become very general among modern naturalists, we should alter the specific name of the above bird, in consequence of its being derived from a local source. We consider this practice, however, although sanctioned by high authority, to be altogether founded in error. In giving local names, it is not inferred that the species is found only in the country which affords the denomination; much less that it is the only species of the group found there. All that is inferred is, that it does actually belong to the country. After all, names are of use only as they tend to point out the subjects for which they stand. And a name long established, although perhaps not the most appropriate, generally becomes so identified with the species as to call it to mind with greater precision than any new name, however significant. Few names indeed, however well chosen, can be exclusively appropriate to species; and a considerable number,—such as names intended to pay a  $2 \land 2$ 

Falco Novæ Hollandiæ. Gmel. Syst. i. p. 264. no. 69. Falco albus. Shaw, White's Voy. pl. in p. 260. New Holland White Eagle. Lath. Gen. Hist. i. p. 217. no. 146.

In Mr. Caley's MSS. we find the following observations on this bird:—" *Milk-white Hawk*. This bird was shot near Duckriver, which is a branch of Port Jackson harbour, about two miles from Paramatta on the road to Sydney. I have seen the species very sparingly. The natives tell me it feeds upon fish. Its weight is 1 lb. 12 oz. The *irides* are light olive, but with a shade of yellow.—*Feb.* 1809."

There are two specimens of this bird in the British Museum, and we have seen two other specimens exactly according with ours, which were lately brought to this country from New Holland. We have also heard of some other specimens. We have therefore little doubt of its being a distinct species, and not the white variety of another, as suggested by M. Cuvier in his "Regne Animal<sup>\*</sup>."

2. RAII. Ast. supernè cineraceus, subtus albus fusco-variegatus, rectricibus pallidè cineraceis, subtus albescentibus fusco-fasciatis.

Rostrum nigrum. Gula alba lineis fuscis gracilibus notata. Pectus fusco-lineatum. Abdomen fusco-fasciatum. Scapu-

compliment to individuals, or names expressing a native or provincial designation,—can be of little use in pointing out a species. Local names, unless actually misapplied, (in which case they should of course be altered,) will be at least as appropriate as these. On the whole, we consider the multiplication of synonýms, and the confusion necessarily resulting from it, to be a greater error in nomenclature than the want of significance in a specific name. And although, from the circumstance of objections having been started against local names, we agree that they should be sparingly used in future; yet when once they have been established, we conceive it more prudent to retain them, acting upon the only sure ground which can be assumed in all such cases,—the ground of priority. **\*** Tom. i. p. 320.

lares

lares tectricesque fuscæ, ad basin albæ fusco-variegatæ. Rectrices fasciis plurimis fuscis instructæ, pogoniis internis albo-marginatis. Pedes pallidi ; ungues nigri. Longitudo corporis,  $15\frac{1}{2}$ ; alæ a carpo ad remigem quartam,  $10\frac{1}{2}$ ; caudæ,  $8\frac{1}{2}$ ; mandibulæ superioris,  $1\frac{1}{8}$ , inferioris, 1 ; tarsi,  $2\frac{3}{4}$ .

Memoriæ JOANNIS RAII, Zoologicorum Britannicorum principis, hæc species perpulchra sit sacra.

3. RADIATUS. Ast. nigro radiato-maculatus, corpore ferrugineo, alis caudâque elongatâ fuscis. Lath.

Falco radiatus.Lath. Ind. Orn. Supp. p. xii. no. 40.Autour radieux.Temm. Pl. Col. 123. Juv.Radiated Falcon.Lath. i. p. 222. no. 153. pl. xi.

- 4. FASCIATUS. Ast. superné fusco-brunneus, subtus albidus, confertim fusco-brunneo-fasciatus, femoribus rufo-fasciatis.
- Rostrum nigrum. Remiges supernè fusco-brunneæ, pogoniis internis rufo-marginatis, fusco-fasciatis; subtus albidæ, fusco-fasciatæ. Rectrices supernè fusco-brunneæ, subtus albidæ, fasciis plurimis nigris instructæ; pogoniis internis supernè rufescentibus, fusco-fasciatis. Longitudo corporis, Maris 16½, Fœm. 19½; alæ a carpo ad remigem quartam, Maris 10¼, Fœm. 12; caudæ, Maris 8, Fœm. 9; mandibulæ superioris, Maris 7/8, Fœm. 15; inferioris, Maris 3/4, Fœm. 13/4, Fœm. 3¼.

This bird is called in New Holland the greater *Bilbil*, as we are informed by Mr. Caley. *Bilbil* seems to be a general name for several species of *Hawks*.

5. APPROXIMANS. Ast. supernè fusco-brunneus, subtus albidus brunneo-variegatus; femoribus rufo-fasciatis, rectricibus obscurè fusco-fasciatis subtus pallidioribus.

Rostrum

Rostrum pedesque pallidè plumbei. Caput, collum, pectusque lineis latis brunneis notata. Abdomen fasciis latis brunneis notatum. Remiges internè rufo-marginatæ, obscurè fusco-fasciatæ: subtus pallidiores, ad apicem fuscæ, brunneo-fasciatæ. Rectrices brunneæ, internè rufo-marginatæ; subtus pallidiores, fasciis plurimis fusco-brunneis instructæ. Longitudo corporis, 19; alæ a carpo ad remigem quartam, 12; caudæ, 10; mandibulæ superioris, 1, inferioris, <sup>7</sup>/<sub>8</sub>; tarsi, 3<sup>1</sup>/<sub>4</sub>.

This species bears a great resemblance to both the last in its colours and the general distribution of them; and we have had some doubt as to our bird being the young of one of them. But we consider that the *fasciæ* on the *abdomen*, which are broader and less frequent than those on the same part in *Ast*. *fasciatus*, form a sufficient mark of distinction between the two species; while its greater size and stronger *tarsi* equally separate it from *Ast*. *radiatus*. The *tarsi* of this latter species are, comparatively speaking, slender, and bring it near the group of *Accipitres*.

#### Genus. ACCIPITER. Raii et Auct.

1. TORQUATUS. Acc. superné cineraceo-fuscus, nuchá rufescente; subtus albidus, rufo-fasciatus.

Falco torquatus. Cuv.

Autour à Collier roux. Temm. Pl. Col. 43.

Juv. Acc. supernè cineraceo-fuscus, albido-variegatus, subtus albidus, pectore fusco-lineato, abdomine fasciis rufo-fuscis latis notato.

Autour à Collier roux jeune. Temm. Pl. Col. 93.

Mr. Caley says, "the native name of this Hawk is Bilbil. It is a bold bird, and makes great havoc among chickens. I once witnessed

witnessed it in the act of darting at a *Blue Mountain Parrot*, which was suspended in a cage from the bough of a mulberrytree within a couple of yards of my door.—The *irides* are yellow. The length of the male is  $12\frac{1}{2}$  inches, of the female,  $14\frac{1}{2}$ ."

Subfam. FALCONINA.

Genus. FALCO. Linn. et Auct.

1. PEREGRINUS. F. cerá pedibusque luteis, corpore suprà cinereo fusco-fasciato, subtus ex rufo albo; tæniis postocularibus nigris, caudà albo-punctatà.

Falco peregrinus. Raii Syn. Av. p. 13. no. 1.
Le Lanier. Pl. Enl. 430.
Le Faucon. Ib. 421.
Peregrine Falcon. Selby, Ill. of Brit. Orn. pl. 15.

Upon a minute comparison of the specimen before us in the Society's collection, which is in a fine state of preservation, with some European specimens of this species, we can discover no material difference between them. The native name of this bird is *Wolga*. 'The eyes, Mr. Caley observes, are of a blueish black ; the *irides* having a faint shade of hazel-brown in a strong light.

- 2. CENCHROIDES. F. supernè rufus, subtus albidus, pteromatibus remigibusque nigris, rectricibus pallidè cineraceis, fascià nigrà latà prope apicem album.
- Fœm. F. superné rufa, subtus albida, pteromatibus remigibusque fuscis, rectricibus rufis graciliter fusco-fasciatis, fasciá latá fuscá prope apicem album.
- Caput rufum, nigro-lineatum. Dorsum scapularesque rufæ nigro parcè notatæ. Tectrices, maris nigræ, fæminæ fuscæ, rufo-maculatæ; inferiores albæ. Gula femoraque albæ. Pectus

Pectus rufescenti-albidum, rhachibus rufis. Remigum margo internus albo angulatus, rufo-variegatus. Rectrices subtus albæ. Rostrum pallidum apice nigro. Longitudo corporis,  $12\frac{1}{2}$ ; alæ a carpo ad remigem secundam, 10; caudæ, 6; rostri,  $\frac{5}{8}$ ; tarsi,  $1\frac{1}{2}$ .

"This bird," as we are informed by Mr. Caley, "is called *Nankeen Hawk* by the settlers. It is a migratory species. My specimens were shot in May and June 1803. At that time the species was plentiful; but ever afterwards I observed it but sparingly. On the 3rd of August 1804, I made the following note :—I saw no *Nankeen Hawks* this autumn.—I never observed it attacking the fowls."

The species is closely allied to a group which is noted for the general similarity and the corresponding disposition of its colours; and which includes our Kestril, F. tinnunculus, Linn, the  $K_{\epsilon\gamma\chig\iota\varsigma}$  of Aristotle; the newly-characterized European species, F. tinnunculoides, Temm.; the African species, F. rupicolus, Daud.; and some others. The group may be observed to possess a greater shortness of wing than is usual among the true Falcons; a character, which points out the passage from those birds to the Hawks. Our species appears decidedly distinct from any of the group which we have met with.

- 3. BERIGORA. F. rufo-brunneus, gulâ, collo, nuchâque pallidè aurantiacis, tectricibus remigibusque fusco-brunneis rufo-notatis, rectricibus cineraceo-brunneis rufo-fasciatis apice pallido.
- Rostrum pedesque plumbei. Pteromatum remigumque pogonia interna rufo-fasciata; externa, remigum quatuor extimarum pogoniis exceptis, rufo-maculata. Tectrices inferiores rufæ. Remiges subtus ad basin albidæ, ad apicem fuscæ. Femora parcè

parcè rufo-marginata. Uropygium, rectricesque fasciis rufis plurimis instructæ, hæ subtus pallidiores. Longitudo corporis, 17—18; alæ a carpo ad remigem secundam, 14— 15; caudæ, 8—9; mandibulæ superioris,  $1\frac{3}{16}$ , inferioris, 1; tarsi,  $1\frac{1}{2}$ .

β. variat gulà colloque magis albidis quam aurantiacis, rectricumque fasciis minùs latis quàm in specimine typico.

The native name of this bird, which we have adopted as its specific name, is *Berigora*. It is called by the settlers *Orangespeckled Hawk*. Mr. Caley informs us, that the orange marks in the plumage of this species are considerably stronger in recent specimens than in those of the Society's collection, which are much faded. The specific characters of this bird accord very closely with those of Dr. Latham's." *Cream-bellied Falcon*\*;" but that bird is described as having a double tooth to its bill, while ours is singly-toothed as in the genuine *Falcons*.

# Subfam. MILVINA.

# Genus. ELANUS. Sav.

1. MELANOPTERUS. El. plumbeus, subtus albidus, remigibus nigricantibus, rostro humerisque nigris, caudà albà, pedibus flavis. Leach.

Falco melanopterus. Daud. Traité d'Orn. ii. 152. sp. cxxiv.
Elanus cæsius. Sav. Ois. de l'Egypte. p. 98. pl. ii. f. 2.
Elanus melanopterus. Leach, Zool. Misc. iii. p. 4. t. 122.
Le Blac. Le Vaill. Ois. d'Afr. pl. 36, 37.

This bird is called by the natives *Najingarring*, as we are informed by Mr. Caley, from whose MSS. we extract the following observations respecting it. "This species was very numerous in the autumn of 1803, that is, the autumn of New

\* Gen. Hist. vol. i. p. 230. no. 165.

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South Wales. I never observed it to attack the fowls; and I have some recollection of the natives telling me its principal food was field-mice. I have seen it at times hover in the air apparently motionless and stationary. It is a migratory species. I have noticed one as early in the season as February 9th, 1805. —The *irides* are reddish-orange."

The *Elanus melanopterus* appears to be spread over a vast extent of the Old World, being numerous in Egypt, and the greater part of Africa, as far as to the Cape of Good Hope. It has also been met with in various parts of India, in Java, and New Holland. There seems to be a considerable variation in the plumage of this species, the black markings of the wing spreading to a greater or less extent in different specimens.

#### Subfam. AQUILINA.

#### Genus. HALIEETUS. Sav.

# 1. CALEI. Hal. rufescenti-brunneus nigro-variegatus, remigibus fuscis, rectricibus cineraceis nigro-fasciatis apice pallido.

- Caput, pectus, abdomen, femoraque rufescentia, nigro-lineata.
  Dorsi crissique plumæ, scapulares, tectricesque superiores pallidiores, maculis subtriangularibus nigris notatæ, rufomarginatæ. Remiges supernè fuscæ, infrà albescentes, nigro-fasciatæ. Rectrices supernè cineraceæ, subtus albidæ, fasciis decem nigrescentibus notatæ. Pedes pallidi; ungues nigri. Longitudo corporis, 23; rostri, 1<sup>3</sup>/<sub>8</sub>; alæ à carpo ad remigem quartam, 17; caudæ, 11; tarsi, 2<sup>3</sup>/<sub>8</sub>.
- Domini GEORGII CALEY, peregrinatoris eruditi, sagacissimique observatoris, qui, per decem annos in Australià commoratus, Naturam in adyto suo, in agris, sylvis, montibusque coluit, hæc species, quam inter multas alias laboribus ejus debemus, nomine designetur.

2. Ca-

- 2. CANORUS. Hal. supernè ferrugineo-brunneus, pteromatibus remigibusque fusco-brunneis; subtus albidus ferrugineo variegatus.
- Caput, collum, dorsum, scapulares, ptilaque pallidè ferrugineobrunneæ, plumis ad basin albis, rhachibus fuscis. Remiges fusco-brunneæ, intimarum pogoniis internis ferrugineomarginatis fusco-fasciatis. Tectrices inferiores ferrugineobrunneæ albido-variegatæ. Rectrices pallidè fusco-brunneæ, pogoniis internis pallidioribus fusco-sparsis, subtus ad basin albescentes. Longitudo corporis, 21; alæ a carpo ad remigem quartam, 16; rostri ad rictum,  $1\frac{1}{2}$ ; caudæ,  $10\frac{1}{2}$ ; tarsi, 2.

We have felt much hesitation in describing this bird as a new species; the specimen in the Society's collection being in bad condition, and in particular much faded in colour. We considered it to bear much resemblance, as far at least as could be judged from a figure, to the young of Dr. Latham's *Falco Novæ*  $Zalandia^*$ , which species has been ascertained to belong to the Australian Fauna. But it does not so well accord with M. Temminck's figures of that species<sup>†</sup>, nor with those given in Forster's drawings in the Banksian library<sup>‡</sup>. We consider it best to record it for the present as a distinct species, with an expression of doubt, until more perfect specimens permit us to speak with certainty.

The native name of this bird is *Moru*, and also *Wirwin*, as we are informed by Mr. Caley. It is called the *Whistling Hawk* by the settlers. That gentleman adds, that "it makes a loud whist-ling noise when on the wing and sailing about in the air. It frequents the upper parts of the harbour (Port Jackson), par-

‡ Nos. 36, 37, 38.

2в2

ticularly

<sup>\*</sup> Gen. Hist. i. p. 160. no. 84. pl. ix. + Pl. Col. 192. ad 224. juv.

ticularly about the Flats, a few miles below Paramatta. The natives tell me it feeds upon dead fish, and the bones (of fish I apprehend) which they leave. The Flats is a noted fishing place for the natives: the water there is shallow, and at ebbtide a great portion of sand is left bare, which, with some marshy land adjoining, forms a convenient resort for several species of birds."

#### Genus. AQUILA. Cuv.

1. FUCOSA. Aq. fusco-brunnea, capite scapularibus ptilisque ferrugineo-brunneis, remigibus femoribus caudâque cuneatâ fusconigris.

Aquila fucosa. Cuv. Règne Anim. pl. iii. f. 1. Aigle à queue etagée. Temm. Pl. Col. 32.

Fam. STRIGIDÆ.

Genus. NOCTUA. Sav.

1. BOOBOOK. N. supernè brunnea, maculis parcis albido-flavescentibus; subtus albida, maculis ferrugineis variegata; digitis pilosis.

Strix Boobook. Lath. Ind. Orn. Supp. p. xv. no. 9. Boobook Owl. Id. Gen. Hist. i. p. 362. no. 66.

"The native name of this bird," as Mr. Caley informs us, " is *Buck'buck*. It may be heard nearly every night during winter uttering a cry corresponding with that word. Although this cry is known to every one, yet the bird itself is known but to few; and it cost me considerable time and trouble before I could satisfy myself respecting its identity. The note of the bird is somewhat similar to that of the European *cuckoo*, and the colonists have hence given it that name. The lower order of the settlers in New South Wales are led away by the idea that every thing is the reverse in that country to what it is in England:

England: and the *cuckoo*, as they call this bird, singing by night, is one of the instances which they point out. The *irides* are yellow." In his references to one of the specimens in the collection, a young male, Mr. Caley notices some variation in the colour of the *irides*.

- 2. MACULATA. N. supernè brunnea, maculis rotundis albis notata, abdomine ferrugineo-brunneo, maculis grandioribus; digitis pilosis.
- Capitis frons albo parcè variegata; occiput, nucha, pectusque maculis albis parvis confertis notatæ. Dorsum, scapulares, tectricesque maculis paulò grandioribus rotundis albis parcè instructæ. Abdomen ferrugineo-brunneum maculis grandibus albis. Remiges fusco-brunneæ ferrugineo-fusco fasciatæ, fasciis pogonii interni ad basin albidis; primæ ad quintam inclusam pogoniis externis plùs minùsve albido maculatis: subtus pallidiores, fasciis basalibus albidis, apicalibus pallidè fuscis notatæ. Rectrices cineraceo-brunneæ pallido-fusco fasciatæ, fasciis pogonii interni prope basin albescentibus; primæ pogonio externo maculis albidis marginato: subtus pallidiores. Longitudo corporis, 11; rostri,  $\frac{7}{10}$ ; alæ a carpo ad remigem tertiam, 8; caudæ, 5; tarsi,  $1\frac{1}{2}$ .

This bird much resembles the last species. Having however seen several specimens of it in fine preservation, we are at present inclined to consider it distinct. The chief points on which we ground this opinion are, that the latter bird is much smaller than N. Boobook, the colour is less ferruginous, and the white spots are much more frequent, and distinctly marked. The fasciæ on the tail-feathers also in our bird are more conspicuous.

Genus.

Genus. STRIX. Linn. et Auct.

1. FLAMMEA? S. corpore luteo punctis albis, subtus albido punctis nigricantibus. Linn.

Strix flammea. Linn. 1. p. 133. no. 8.

L'Effraie. Pl. Enl. 440.

Barn or White Owl. Selby, Illust. of Brit. Orn. pl. 24.

This bird varies from our European species in the buff colour being considerably darker, and the spots on the *abdomen* being larger and more deeply marked than is usual in our own. In our species, however, there is considerable variety; and as we have had an opportunity of examining but a single specimen from New Holland, and that in rather inferior condition, we do not wish to state with any confidence an opinion as to the identity of these birds.

#### Ordo II. INSESSORES.

Tribus. FISSIROSTRES. Cuv.

Fam. HIRUNDINIDÆ.

Genus. HIRUNDO. Linn. et Auct.

1. PYRRHONOTA. Lath. MSS. Hir. suprà cæruleo-nigra, subtus fulvescens, fascià frontali ferrugineà, uropygio fulvo, alis caudàque subfurcatà fuscis.

Remiges rectrices que subtus pallidè fuscæ. Tectrices inferiores fulvæ. Longitudo corporis,  $4\frac{9}{10}$ ; rostri ad frontem,  $\frac{1}{5}$ , ad rictum,  $\frac{1}{2}$ ; alæ à carpo ad remigem primam,  $4\frac{3}{10}$ ; caudæ,  $1\frac{1}{3}$ ; tarsi,  $\frac{9}{20}$ .

Dun-rumped Swallow. Lath. Gen. Hist. vii. p. 309. no. 38.

2. JA-

- 2. JAVANICA. Hir. cærulescenti-nigra, subtus albida, fasciâ latâ frontali genis gulâ pectoreque ferrugineis, remigibus caudâque forficatâ fusco-nigris, rectricibus lateralibus albo-notatis.
- Remiges subtus rectricesque inferiores pallidè fuscæ. Rectrices externæ fasciâ albâ obliquâ, cæteræ laterales maculâ albâ subrotundatâ, in medio pogonii interni notatæ; duæ mediæ sine notâ. Longitudo corporis,  $5\frac{4}{5}$ ; alæ ad remigem primam,  $4\frac{1}{20}$ ; rostri ad frontem,  $\frac{1}{5}$ , ad rictum,  $\frac{1}{2}$ ; rectricis externæ,  $3\frac{3}{10}$ , mediæ,  $1\frac{9}{20}$ ; tarsi,  $\frac{9}{20}$ .

Hirundo Javanica. Sparm. Mus. Carls. iv. t. 100. Hirondelle Orientale. Temm. Pl. Col. 83. f. 2.

We have been led into a more detailed description of this bird than we usually give to an already described species, in order to point out the differences of its characters from those of our European *Hir. rustica*, with which it has been generally confounded. The chief distinction is in its inferior size; in the side-feathers of the tail being shorter, and at the same time less gracile; in the frontal band being wider, and in the ferruginous colour extending over the breast, in place of the broad black band which characterizes the European species. Our New Holland specimens accord accurately with the figures and descriptions of this species given by MM. Sparmann and Temminck from Javanese specimens. The migratory habits of these birds account for their wide dispersion.

In Mr. Caley's MSS. we find the following observations on these birds. "The resting-places of these *Swallows* are on the dead boughs of large trees, where I have seen several of them gathered together, in the same manner as European *Swallows*, on the roof of a house. I apprehend, however, that it is when their young have taken to flight that this occurs."

" The

"The earliest<sup>\*</sup> period of the year that I noticed the appearance of *Swallows* was on the 12th of July 1803, when I saw two: but I remarked several towards the end of the same month in the following year (1804). The latest period I observed them was on the 30th of May 1806, when a number of them were twittering and flying high in the air.—When I have missed them at Paramatta, I have sometimes met with them among the north rocks, a romantic spot about two miles to the northward of the former place."

"The natives call the Swallow, Berrin'nin; they told me it built its nest in the hollow limbs of white gum-trees, using bark, grass, hair, or similar substances; but when it built in old houses it made use of mud. These old houses are the deserted huts of settlers, who have abandoned their worn-out farms; and the nests are constructed on the wall-plates, as they are called in the colony. Of the nests which have been brought to me, I have observed that the outside was made of mud and the inside lined with feathers. Though I have seen Swallows more or less almost throughout the year, yet it is my belief that they are migratory.—The eyes are black."

#### Fam. CAPRIMULGIDÆ.

#### Genus. CAPRIMULGUS. Linn. et Auct.

1. GUTTATUS. C. suprà rubicundo-ferrugineus, fusco-maculatus, remigibus brunneis flavo-guttatis, guttis in seriebus quinque regulariter dispositis.

Partes superiores *capitis colli* et *dorsi*, *tectrices*que *alarum* primæ ex rubicundo-ferrugineo, fusco, nigroque variegatæ : plu-

\* We must bear in mind, that Mr. Caley's observations as to the earliness or lateness of the year have a reference to the year of New Holland.

mulæ

mulæ fasciolis transversis nigris alternis rectis, alternis undulatis, notatæ, ad latera rhachium maculis rhomboideis instructæ. Pectus, abdomen, candaque subtus sordidè flavescentes, obscurèque fusco-fasciatæ. Alæ brunnææ; remigum pogoniis externis guttis orbicularibus regulariter circumscriptis, et in seriebus quinque parallelis dispositis, notatis; pogoniis internis fasciis transversis, guttis oppositis, instructis. Remiges omnium ordinum fasciolis semiellipticis terminatæ. Pteromata pogonio interno maculis orbicularibus minoribus guttata; ptila pogonio interno rufofasciata. Rectrices brunneæ, fasciis latis flavescenti cinereoque variegatis. Tarsi plumulis fuscis saturatioribus ad digitos usque vestiti. Longitudo corporis ab apice rostri ad basin caudæ, 5; rostri ad rictum,  $\frac{1}{27}$ ; tarsi,  $\frac{4}{5}$ .

The only specimen of this bird contained in the Society's collection was injured before it came into the hands of Mr. Caley. It is however sufficiently preserved to show the genus to which it belongs, and to afford a clear specific distinction. The bill has all the characters of that of the true Caprimulgus, being weak, narrowed, and much compressed at the apex, with round and elevated nostrils : the legs also, like those of the same genus, are short, weak, and feathered to the toes, which are uneven, and have the middle nail serrated. The wings are more rounded than in other Goat-suckers; but this apparent deviation from the genus is probably owing to the mode in which the specimen has been prepared. The plumage above is nearly perfect; and the wings exhibit without any deficiency the beautiful series of regular round spots described above, from which the specific name has been derived. But the plumage of the abdomen, and of the under-parts generally, is defective. Mr. Caley informs us that the bird was picked up dead on his premises in its pre-

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sent

sent imperfect state, and was supposed to have been killed by a cat. Its native name, he adds, is *Wat'watkin*.\*

#### Genus. ÆGOTHELES<sup>†</sup>.

Rostrum breve, crassiusculum, latissimum, basi depressum, tomiis integris, rictu amplissimo. Culmen carinatum, rotundatum, dertro unguiculato, subadunco. Mandibula inferior apice ad accipiendum superioris dertrum canaliculata.

\* The following species of this genus, which has been kindly lent to us by Mr. Leadbeater for description, was received from New Holland, and does not appear to have been hitherto recorded.

#### ALBO-GULARIS. C. brunneus nigro griseo fulvoque varius, abdomine fulvescente brunneo-fasciato, maculâ ovali obliquâ ad gulam utrinque albâ.

Caput griseo-albo undulatim sparsum, lineis nigris in medio notatum. Gula, regio ophthalmica, collumque subtus brunneo-fulvo maculatæ: torque a gulâ ad nucham extendente e maculis fulvis composito; maculà albà grandi ellipticà utrinque ad gulam. Pectus brunneum maculis obscurè albidis griseo-sparsis notatum. Dorsum brunneum strigis longitudinalibus griseo albidoque sparsis supernè, maculis fulvis parcis infrà, notatum. Tectrices superiores scapularesque saturate brunneæ, fulvo griseoque parcè notatæ; inferiores brunneæ, fulvo-fasciatæ. Remiges saturatè brunneæ, omnium pogoniis, tribus primis exceptis, maculis fulvis utrinque notatis; secundæ et tertiæ maculå fulvå unicå, tertiæ et quartæ maculå albå, pogoniis externis notatis; tertiæ maculâ albâ unicâ pogonio interno notato: subtus pallidè brunnescentes; tertià maculà albà utrinque, cæteris interioribus maculis albidis frequentibus notatis. Abdomen fulvum, brunneo-fasciatum, fasciis infrà minùs frequentibus. Rectrices saturatè brunneæ, mediarum pogoniis ambobus, cæterarum, duabus extimis exceptis, internis fasciis griseis brunneo-undulatis notatis; quatuor extimarum pogoniis internis, et duarum extimarum pogoniis externis, fasciis fulvis undulatis; subtus pallidiores, fasciis fulvis interruptis notatæ. Rostrum nigrum. Pedes brunneæ. Longitudo corporis,  $14\frac{2}{5}$ ; rostri ad frontem,  $\frac{4}{5}$ , ad rictum,  $1\frac{1}{10}$ ; ala a carpo ad remigem secundam,  $7\frac{4}{5}$ ; cauda, 6; tarsi,  $\frac{7}{10}$ .

+ Aιγοθηλης, Caprimulgus.—We revive the Aristotelian name of the Goatsucker. The word, although originally conveying an erroneous meaning, has been translated into so many languages, and, as such, has become so identified with the birds of this family, that we feel no hesitation in applying it to the present group.

Vibrissæ

Vibrissæ mastacales ad apicem simplices, ad basin pectinatæ : capistrales numerosæ, longissimæ, porrectæ, utrinque pectinatæ. Nares in medio rostri positæ, lineares, obliquæ, subpatulæ, posticè angustiores.

- Alæ breves, rotundatæ. Remiges prima et sexta ferè æquales brevissimæ, secunda et quinta æquales longiores, tertia et quarta æquales longissimæ; secundæ pogonio externo leviter, tertiæ ad quintam inclusam pogoniis externis profundè emarginatis : secundæ ad quintam inclusam pogoniis internis emarginatis.
- Pedes congrui. Tarsi elongati, subgraciles, compressi, nudi. Digiti liberi, subgraciles, ferè æquales. Hallux longus, debilis. Ungues compressissimi, medio integro. Acrotarsia. acropodiaque scutulata; horum scutis confertis approximantibus.

Cauda mediocris, rotundata.

The perfection of the family of Caprimulgidæ may be considered as most fully exhibited in the true Caprimulgus, Auct., of which the common European species is an adequate example. In that genus, which forms part of the typical group of the Fissirostral tribe of the Insessores, the chief characters that distinguish the birds of the tribe are strongly developed, namely, the powers of flight and of receiving their food within the wide gape of their bill when on the wing. The chief strength of the bird is thus centred in the wings and the rictus of the bill; and a proportional deficiency takes place in those other members which are less necessary to it in the performance of its peculiar functions. The bill itself is feeble, and apparently useless in securing its prey, which object is effected chiefly by a viscous exudation within the gape, and a regularly disposed network of strong bristles, which externally margins the rictus. The legs also

also are short and feeble, and the toes weak and irregular; the middle toe, however, is furnished with a serrated nail, which seems in some measure to compensate for the general deficiency of the member, the servation being apparently intended, as has been observed in a former volume of our "Transactions," for the purposes of seizure\*. The present genus Ægotheles evidently exhibits a deviation from these typical characters. The wings lose the superior powers of flight displayed in the true Caprimulgus, and instead of being long and acuminated become short and rounded; the bill and legs assume somewhat of the length and strength usually attached to these parts; while as the latter members regain their general powers, the serration of the middle unguis, which accompanied the weaker conformation, entirely disappears. The rictal bristles also partially lose their strength and regularity of disposition ; and here, as well as in the succeeding group of Podargus, seem to be transferred to the front or base of the bill.

The distinction between  $\mathcal{E}gotheles$  and the true Caprimulgus is thus sufficiently evident. From M. Cuvier's genus Podargus the former group also differs in its general comparatively weaker conformation, holding in this respect an intermediate place between Caprimulgus and Podargus. The bill is more depressed than in Podargus, and more generally widened towards the apex: the shape and the disposition of the narcs also, as well as the structure of the quill-feathers, is different. The tarsi are weaker and more compressed, and at the same time comparatively more elongated; and the toes are nearly even, while in Podargus the middle toe is considerably longer than the rest. We have hitherto met with but one species belonging to this form which seems confined to New Holland.

\* Vol. xiv. p. 407.

1. Novæ

1. NOVE HOLLANDIE. Æg. fusco nigro albidoque nebulosus, subtus albidus, collo pectoreque fasciis obscuris, cristâ frontali erectâ setaceâ. Lath.

Caprimulgus Novæ Hollandiæ. Lath. Ind. Orn. p. 588. no. 18. Crested Goatsucker. Phillips's Bot. Bay, pl. in p. 270.

This bird is called by the natives *Teringing*'. Mr. Caley cannot exactly discover in his Notes where he met with his specimen; but as far as he recollects it was shot in the woods below Sydney.

# Genus. PODARGUS. Cuv.

- 1. STANLEYANUS\*. Lath. MSS. Pod. suprà fusco cinereoque fasciatus, capite maculis rhomboideis nigris notato, collo dorso tectricibusque nigro-strigatis; subtus cinereo sordidoque fulvo punctatus, nigro-strigatus, rictu amplissimo.
- Ptilosis superior ex fusco cinereoque varia, capite saturatiore; hujus plumulis transversè fasciatis, maculâ terminali rhomboideâ nigrâ. Colli dorsique plumæ fasciis latioribus punctulatis ornatæ; strigâ medianâ nigrâ, ad latera undulatâ, secundùm rhacheos longitudinem excurrente. Remiges primores fuscæ, saturatiores, fasciis intervallis æqualibus dispositis, in pogonio externo albis, in pogonio interno nigro et cinereo undulatis. Remiges secundariæ fasciis obscurioribus fusco-cinereoque undulatis notatæ. Cauda cuneata:

• Several species of the New Holland birds in the Society's collection were described by Dr. Latham in his "General History," but did not at the same time receive their scientific names, which were intended to appear in a second edition of the "Inder Ornithologicus." Being unwilling in our present undertaking to anticipate the names of the first describer of these birds, we applied to Dr. Latham for permission to use his manuscript names, which he kindly granted. In the case of the species before us, he expressed his wish to dedicate it to Lord Stanley, who had presented him with the specimen from which he drew his original description; and we feel much pleasure in uniting with him in paying this well-merited compliment.

rectrices

rectrices intermediæ longiores, sequentes, per paria, gradatim breviores, exteriores abruptiùs abbreviatæ; omnes fasciis fusco cinereoque punctulatis undulatisque, obscuris. Partes inferiores diluto-cinereo et sordido-fulvo punctatæ, fasciis obscuris, rhachibus strigis nigris insignibus notatis; fasciis gulæ jugulique tenuioribus, strigis angustioribus. Tarsi flavescentes. Rictus amplissimus. Squamæ narium subpatulæ. Setæ capistri numerosæ, densæ, elongatæ, antrorsum spectantes. Vibrissæ mastacales deorsum versæ; margo mentalis vibrissis plurimis elongatis subdecompositis circumdatus. Longitudo corporis, 23; alæ a carpo ad remigem quartam, 12; caudæ, 10; mandibulæ superioris ad frontem,  $1\frac{1}{2}$ , ad rictum, 3; inferioris,  $2\frac{1}{2}$ ; tarsi,  $1\frac{3}{10}$ .

Wedge-tailed Goatsucker. Lath. Gen. Hist. vii. p. 368. no. 38.

- In honorem viri illustris, in Ornithologiâ præstantissimi, EDOUARDI Baronis STANLEY, Societatis Linneanæ Pro-Præsidis, hæc avis nomen obtineat.
- 2. HUMERALIS. Pod. suprà cinereo-fusco sordidoque fulvo variegatus, capite dorsique lateribus insignè nigro-strigatis, fronte straguloque tenuiter ulbo punctatis fasciolatisque, fasciis duabus latis humeralibus fulvo alboque punctulatis ; subtus strigis nigris fasciisque approximantibus sordido-fulvis tessellatus.
- Capitis plumæ strigå latå in medio notatæ, fasciå albidå, punctuli instar, præditæ: in fronte maculæ latiores fasciam albidam constituunt. Cervix sordido-fulvo cinereoque densè variegata, strigis longitudinalibus obscurioribus fasciisque terminalibus rarioribus instructa. Parapterum strigå medianâ nigrâ insignè notatum; ad latera exteriora fasciolis fulvo cinereoque variegatis tæniam latam efformantibus. Tectrices superiores nigro, fusco, et cinereo variegatæ: plumæ

plumæ complures, pogonio externo fasciâ latâ subterminali præditæ, fulvo alboque punctulatæ, alas tæniis latis duabus exornant. Remigum primarum pogonia interna fasciis obscurioribus, externa fasciis albis insignioribus notata. Cauda fusco cinereoque variegata, fasciis saturatis nigricantibus instructa. Partes inferiores sordido-fulvo cinereo albidoque variegatæ; strigis nigris colli insignioribus undulatis; abdominis strigis nigris fasciisque fulvis transversim confluentibus. Femora plumis nigricantibus vestita. Tarsi colore corneo imbuti. Rictus dilatatione rictui Pod. Stanleyani vix æqualis. Irides flavi. Longitudo corporis, 20; alæ a carpo ad remigem quartam, 12; caudæ,  $8\frac{1}{2}$ ; rostri ad frontem,  $1\frac{1}{2}$ , ad rictum,  $2\frac{1}{2}$ ; tarsi,  $1\frac{1}{3}$ .

Cold River Goatsucker? Lath. Gen. Hist. vii. p. 369. no. 39.

The birds of this genus in the Society's collection bear such a general resemblance to each other, that we have felt some hesitation in describing them as different species. The careful examination of many individuals in their own country will alone determine with certainty whether they are distinct, or merely varieties of the same species from age or sex. With respect to the two foregoing species we have to observe that Dr. Latham, by the examination of other subjects, has been led to the same result as we have been by the comparison of the specimens in our collection; and has described these birds respectively as the Wedge-tailed and Cold River Goatsuckers. The chief differences between them are as follows: The Pod. Stanleyanus is somewhat larger than the Pod. humeralis; the colour of its plumage is more purely cinereous and brown, being almost without any mixture of tawny; the external marks are more delicate, and the gape of the bill is wider. The Pod. humeralis is distinguished by bold black longitudinal streaks, some of which are of considerable

siderable breadth, which mark the upper parts; by white dots or bands at or near the extreme points of the plumes of the head, forehead, neck, back, and adjoining parts of the wings; by a decided admixture of tawny among its colours; and by two strongly-marked fulvous bands, which cross the coverts of the wings. On the underside the transverse bands of the plumes meeting the longitudinal streaks along the shafts at right angles, afford a somewhat regularly chequered marking, which appears peculiar to this latter bird.

- 3. CUVIERI. Pod. suprà cinerco brunneo albido fulvoque variegatus, graciliter nigro-strigatus, dorso scapularibus pteromatibusque saturatioribus, his albido fulvoque terminatis, remigibus fusco-brunneis maculis albis quadratis; subtus pallidior fusco-fulvo undulatus, nigro-strigatus; rictu minùs amplo.
- Vibrissæ capistrales nigræ apice albo-punctatæ. Capitis plumæ frontales albo notatæ, occipitales saturatiores, omnes strigis gracilibus nigris præditæ. Colli, abdominis cervicisque plumæ pallidiores nigro tenuiter strigatæ, strigis pectoralibus paulo Scapulares pteromataque saturationes, apicibus latioribus. albo fulvoque notatis. Remiges primariæ fuscæ, pogonio externo maculis quadratis fulvo parcè punctulatis, pogonio interno fasciis obscuris albido fuscoque variis, notatæ; secondariæ, fusco fulvo albidoque undulatæ, variegatæque; interiores in medio nigro-strigatæ, apicibus albis. Rectrices fulvo cinereo albidoque variæ, fasciis obscuris albido nigroque punctulatis notatæ; prope apicem in medio nigro-strigatæ, subtus pallidiores. Irides brunneæ. Longitudo corporis, 16; alæ a carpo ad remigem quartam, 10; cauda, 8; rostri, ad frontem,  $1\frac{1}{10}$ , ad rictum,  $2\frac{1}{10}$ ; tarsi,  $1\frac{3}{20}$ .
- In honorem principis Zoologorum, hujus generis fundatoris, hæc species nominatur.

This

This bird also exhibits so general a resemblance to the preceding species, that we should at once have referred it to it as a variety, were it not that it differs in its geographical situation, as well as in some minuter characters. It is a native of Van Diemen's Land, where it was met with by Mr. Caley, while the other species is found in New South Wales. That gentleman noted also that the *irides* of the present bird were brown, while those of Pod. humeralis were yellow. The chief difference in their plumage is as follows: The longitudinal streaks on the head of Pod. humeralis are bold and broad, diffusing a strong black shade over the head; those of Pod. Cuvieri are slender and more distant from each other, and leave the fuscous-brown of the head predominant. The Pod. Cuvieri wants the fulvous fascia on the shoulder, and the fascia on the tail are not so strongly marked as in Pod. humeralis. The bill also of the Van Diemen's Land bird is somewhat shorter than the bill of the other. We have seen a few other specimens of Pod. Cuvieri which came from the same locality as our specimen; as also some other birds of the New South Wales species : and those leading marks of distinction stated above seemed constant between them. At the same time we must observe, that there appeared much variation in the different specimens of each of these supposed species; and we consequently cannot speak with the same certainty respecting the difference of species in this group, as in groups less subject to variation. We therefore state our doubts on these points, while we follow the general plan which we have prescribed for ourselves in all such doubtful cases, of keeping apparent species distinct, until proof is given of their being identical.

Mr. Caley calls all these birds by the native name of *Benit*'. He observes that they are night birds, and seem stupified when found upon the wing by day.

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Fam.

#### Fam. TODIDÆ.

Genus. EURYSTOMUS. Vieill. (Colaris. Cuv.)

1. ORIENTALIS. Eur. cæruleo-viridis, jugulo lazulino-strigato, remigibus rectricumque apicibus nigris, maculâ alarum cæruleâ.

Coracias orientalis. *Linn.* i. 159. Rollier des Indes. *Pl. Enl.* 619.

In Mr. Caley's MSS. are the following notices of this bird. "Its native name is *Natay'kin*; the settlers call it *Dollar Bird*, from the silver-like spot on the wing.—It is a noisy bird when on the wing, but mostly so in the evening, after other birds have gone to roost. It may then both be heard and seen on the tops of trees, particularly on dead branches, where it is most easily shot by so exposing itself. Its flight is much like that of the *Swallow*, but I have never observed it long upon the wing; as it generally betakes itself, as I before mentioned, to the top of some high tree or decayed branch, from whence it darts more readily upon its prey. At this time (the evening) the *Beetles*, which I have found in their stomachs, are upon the wing.—It is a bird of passage.—The earliest period of the year at which I have noticed it was on the 3rd of October 1809; and I have missed it early in February. It is most plentiful about Christmas."

This bird, which seems to spread itself very generally over the Eastern world, was originally placed by Linnæus among the *Rollers*, or his genus *Coracias*; and although it has latterly been formed into a distinct genus from that group, it has still been arranged next to it by the greater number of systematic writers. M. Vieillot observing the extreme width of the base of the bill, grouped it among the *Berry-eaters\**, a family which he formed

out

<sup>\* &</sup>quot; Fam. 16. BACCIVORI."-Analyse d'une Nouv. Orn. Elem. p. 37.

out of the genus Ampelis, Linn., and some conterminous birds. He however still assigned it a station in the series of his genera, immediately subsequent to the Linnean genus Coracias. The bird evidently exhibits strong relations to both these groups. In its colours, its size and strength, and its general form, it bears a resemblance to the Rollers; while in the wide gape of the bill it equally seems to approach the broad-billed Berry-eaters. Judging, however, even from external characters, we have no hesitation in stating our opinion, that these relations are merely analogical, and that the natural station of the bird is in the tribe of Fissirostres, but at that extremity of the group where it joins the Dentirostres. The shape of the wing, evidently formed for a rapid flight,-the comparative shortness and weakness of the legs, indicating the pursuit of an aërial rather than of a terrestrial prey,-and the notched apex of the bill, denoting its food to be rather animal than vegetable,-all are characters which point out its affinity to the Fissirostral group, whose perfection consists in their powers of flight, and of inclosing their prey within their gape as they pursue it on the wing. The brilliant colours of this bird, which have hitherto led to its being placed among the Rollers, equally associate it with the present family of Todidæ and with the neighbouring Halcyonidæ: while the bill appears decidedly formed according to the same model as that of Eurylaimus\* and the conterminous group of Podargus. We had much pleasure in finding that our conjectures respecting the affinities of this group, which we had drawn merely from its external characters, were confirmed by the accounts of its habits and mode of life, which we have extracted above from Mr. Caley's manuscripts. We must observe in addition, that this naturalist, arranging his birds without any predilection for systems,

2 D 2

and

<sup>\*</sup> See Linn. Trans. vol. xiv. p. 430; and Zool. Researches in Java, no. 2.

and in consonance merely with what appeared to him to be their natural affinities, of which he formed his judgement by actual observation of their manners, has grouped these birds in the same case with the *Caprimulgi*, *Podargi*, *Hirundines*, and *Artami*, in which situation they may still be seen.

> Fam. HALCYONIDE. Genus. DACELO. Leach.

1. GIGANTEA. D. albida, capitis subcristati vertice maculà postoculari nuchalique dorso anteriori alisque fusco-brunneis, his cæruleo-variegatis; caudà ferrugineà fusco-brunneo-fasciatà, apice albo.

Dacelo gigantea. Leach, Zool. Misc. ii. p. 126. pl. cvi.

Alcedo gigantea. Lath. Ind. Orn. p. 245. no. 1.

Great Brown Kingsfisher. White's Journ. pl. in p. 137. Phill. Bot. Bay, pl. in p. 287.

This species is thus referred to in Mr. Caley's notes. "The settlers call this bird the Laughing Jackass, and the natives, as I think, Cuck'unda. It is common throughout the colony, at least in all the forest-land of the interior parts. It makes a loud noise, somewhat like laughing, which may be heard at a considerable distance; from which circumstance, and its uncouth appearance, it probably received the above extraordinary appellation from the settlers on their first arrival in the country. I have also heard it called the Hawkesbury Clock (clocks being at the period of my residence scarce articles in the colony, there not being one, perhaps, in the whole Hawkesbury settlement), for it is among the first of the feathered tribes which announce the approach of day. When sleeping in the woods, I have often found its singular noise most welcome in the morning .-- Its habits were very different from those of the Three-toed Kingsfisher." (Ceyx azurea, Lacep.)

2. LEACHII.

- 2. LEACHIII. Lath. MSS. D. albida fusco-fasciata, capite fuscolineato, dorso anteriori scapularibus alisque fuscis, his cæruleo azureoque variegatis, uropygio cæruleo, caudû azureâ, apice albo.
- Caput subcristatum, albidum, fusco-lineatum. Gula albida. Pectus, nucha, abdomen, crissumque albidæ, fasciis fuscis gracilibus undulatæ. Dorsi anterioris plumæ basi albæ apice fuscæ, inferioris uropygiique basi fuscæ, medio albæ, apice cæruleæ. Ptila anticè brunneo-fusca, posticè apice cærulea. Pteromatum plumæ externé azureæ, interné fuscæ. Tectrices inferiores albidæ fusco-fasciatæ. Remiges ad basin albæ, pogoniis externis à medio azureis, internis fuscis. Rectrices; suprà, pogoniis externis azureis apice albis, trium externarum pogoniis internis albis fusco-fasciatis ferrugineo parcè variegatis, quartæ pogonio interno fusco prope rhachin azureo, duarum mediarum pogoniis internis azureis, externis fuscis; subtus, extimæ albæ fusco-fasciatæ, quatuor mediæ fuscæ apice albo. Rostrum fuscum, mandibulå inferiori apice supràque albidâ. Longitudo corporis, 151; alæ ad remigem tertiam,  $7\frac{4}{5}$ ; caudæ,  $5\frac{3}{5}$ ; mandibulæ superioris, ad frontem,  $2\frac{7}{10}$ , ad rictum,  $3\frac{7}{10}$ ; tarsi,  $1\frac{3}{20}$ .

New Holland Kingsfisher. Lath. Gen. Hist. iv. p. 11. no. 2.

In honorem GULIELMI ELFORD LEACH, Medicinæ Doctoris, Societatum Regiæ et Linneanæ Socii, &c. &c., ornithologi eximii, qui primùm hoc genus detcxit characteribusque illustravit, hæc species perpulchra nominatur.

The specimen of this species in the Society's collection was presented by Mr. Brown, who discovered it, on the 24th of October 1802, in Keppel Bay on the East Coast. The species was subsequently met with at Shoalwater Bay, and Broad Sound, on the same coast.

Genus.

Genus. HALCYON. Swains.

1. CINNAMOMINUS. Halc. cæruleo-viridis; pileo, collo, plumisque totis subtus pallidè cinnamominis; auribus viridibus; nuchû torque nigro gracili ornatû. Swains.

Halcyon cinnamominus. Swains. Zool. Illust. pl. 67.

2. COLLARIS. Halc. viridi-caruleus, corpore subtus collarique albis. Lath.

Halcyon collaris. Swains. Zool. Illust. pl. 27. Alcedo collaris. Lath. Ind. Orn. 250. no. 14. Sacred Kingsfisher. Phill. Bot. Bay, pl. in p. 156.

"This bird," says Mr. Caley, "begins to get noisy in the spring, and may be seen frequently. A pair of them had a nest annually, to the best of my recollection, in a large dried tree in my garden. After the breeding season they departed; but whether to the woods or to a greater distance I never discovered. From the circumstance of their appearing regularly in my garden and frequenting the above-mentioned dried tree, I considered them migratory."

- 3. SANCTUS. Halc. cæruleo-viridis, torque nuchali abdomine pectoreque albidis ferrugineo-variegatis, hoc fusco-undulato, superciliis maculà occipitali gulàque albis, tænià ante oculos ferrugineà, collari occipitali strigàque suboculari nigris.
- Capitis plume frontales ferrugineo-marginatæ. Dorsum anterius scapularesque fusco-virides, uropygio cæruleo. Tectrices superiores ferrugineo-marginatæ, inferiores ferrugineæ. Remiges intùs apiceque fuscæ, cæruleo externè marginatæ; prima fusca externè ferrugineo-marginata, subtus fusca internè fulvo-marginata. Rectrices cæruleæ, pogoniis internis fusco-marginatis, subtus fuscæ. Rostrum fuscum,

fuscum, mandibulâ inferiori basi pallidâ. Longitudo corporis,  $7\frac{1}{5}$ ; rostri ad frontem,  $1\frac{3}{20}$ , ad rictum,  $1\frac{19}{20}$ ; alæ a carpo ad remigem secundam,  $3\frac{13}{20}$ ; caudæ,  $2\frac{3}{10}$ ; tarsi,  $\frac{1}{2}$ .

If the several birds, which have been described as varieties of the Alcedo sacra of Gmelin, be actually found to belong to that species, our bird may probably be added to the list. We have however much doubt of their being mere varieties. In the species of Kingsfishers which have been well ascertained, we find little variation of plumage; and we seldom observe such an extensive geographical distribution among them as is assigned to the Alcedo sacra. The various groups of this family moreover approach so nearly to each other in their characters. particularly in the distribution of their colours, that we need not be surprised at finding that most of the Kingsfishers of the islands of the Indian Ocean bear a general resemblance to each other, so as to appear at first sight varieties of one species. We have not materials sufficient in Europe to enable us to come to any decision on this subject : that must be determined on the spot. But with respect to our New Holland bird, we consider ourselves justified in keeping it distinct from the sacred Kingsfisher, until at least some strong grounds are advanced to prove it the same. It differs both from Dr. Latham's and Gmelin's original descriptions of Alcedo sacra, which were taken from a bird belonging to the Friendly Islands, by having a conspicuous collar round the neck; by the under parts being yellowishwhite, varied with ferruginous and undulated with slight fuscous fasciæ, instead of being pure white; and by having a black streak running longitudinally before and behind the eye, with a black collar margining the hind part of the head, and a conspicuous white spot adjoining this collar on the occiput. The Alcedo sacra, moreover, is described as being more than nine inches in length, Gmelin making it nine and a half, while our bird scarcely exceeds

exceeds seven inches. Of all the alleged varieties of the *sacred* Kingsfisher the bird before us comes nearest to the description of those which are said to be found in New Zealand.

Genus. CEYX. Lacepede.

1. AZUREA. C. saturaté azurea, corpore subtus lorisque flavescentibus, lateribus colli maculá obliquá albá. Lath.

Alcedo azurea. Lath. Ind. Orn. Supp. p. xxxii.

Alcedo azurea. Swains. Zool. Illust. pl. 26. Lewin, Birds of N. Holl. p. 5. pl. 1.

Mr. Caley thus observes upon this bird in his manuscripts. "I have never noticed this species leaving the salt water beyond the distance of two hundred yards, and seldom so far. It inhabits the harbour of Port Jackson, particularly the upper parts of the branches or creeks. Some birds have the breast considerably more red than others. I have met with what I considered to be the same species in a brushy creek at Western Port. I never saw it alight in trees."

> Fam. MEROPIDÆ. Genus. MEROPS. Linn.

1. MELANURUS. M. viridis, tæniå ante postque oculos lunulå pectorali remigum apicibus caudâque nigris, occipite remigibusque castaneis, gulâ flavâ, tæniâ suboculari uropygio crissoque cæruleis.

Rostrum nigrum. Remigum externarum pogonia extima viridia. Cauda nigra, rectricibus duabus mediis longissimis; harum pogoniis utrinque, primæque pogonio externo viridi-marginatis. Longitudo corporis ab apice rostri ad apicem mediæ rectricis, 10, ad apicem rectricis extimæ, 8; alæ a carpo ad remigem primam,  $4\frac{1}{20}$ ; caudæ, 5; rostri ad frontem,  $1\frac{1}{5}$ , ad rictum,  $1\frac{1}{2}$ ; tarsi,  $\frac{3}{5}$ .

In

In Dr. Latham's first description\* of his Merops ornatus, a New Holland species of this genus not in the Society's collection, a bird is alluded to, which was figured in Mr. Lambert's collection of drawings, and whose characters nearly accord with the bird before us. Dr. Latham conjectures it to be the female of M. ornatus. In the second edition of his work<sup>+</sup>, he repeats the same observation, but does not refer to the specimens in the Society's museum. One of the birds, however, in the collection is a male, as we find recorded in Mr. Caley's Dr. Latham's conjecture respecting sex consequently notes. proves erroneous. And the two specimens from which our above description is taken, according in every particular with each other, and exhibiting a fine state of preservation, are so distinct from M. ornatus, that we cannot consider ourselves authorised to come at once to the conclusion that they are varieties of that species. The tail in our bird is black, which in *M. ornatus* is chestnut; and the fore part of the head is of the same colour as the back, while in Dr. Latham's bird it is dull orange t. Both these species differ from the M. viridis of Linnæus by their greater size; by the throat being orange-yellow instead of blue, and by having a conspicuous longitudinal streak of light blue immediately under the black band that passes beneath the eye. The rectrices also of the Indian Bee-Eater are green above, while in the other two species they are either black or chestnut.

Mr. Caley informs us, that the specimens in the Society's collection were brought to him dead: he never had an opportunity of seeing the bird in its living state. He was told that it was a bird of passage, and bred near the conflux of the Grose with the Hawkesbury River. Its nest was said to be in the

\* Gen. Syn. Supp. ii. p. 155. no. 16. + Vol. iv. p. 180. no. 9.

<sup>‡</sup> The bird which Mr. Lewin has figured in his "Birds of New Holland" (pl. 2.), and which he has referred to Dr. Latham's Merops ornatus, seems rather to belong to our species.

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sandy

sandy banks of the river. To one of the specimens\* the following note is appended. "Iris narrow, crimson: male.—Oct. 1804."

Tribus. DENTIROSTRES. Cuv.

Fam. LANIADÆ.

Subfam. DICRURINA. Swains.

On proceeding to the Dentivostral Tribe of the Perching Birds, and commencing with the family of Laniadæ which forms part of the typical group of that tribe, we find representatives of most of the greater subdivisions of the family among the Australian birds. One subdivision alone is wanting, the subfamily of Tyrannina, Swains. That group, or at least the typical species of it, appears confined to the New World. The present subfamily of Dicrurina seems, on the other hand, to belong exclusively to the Old World; and specimens of two of its most prominent groups, the genera Artamus and Dicrurus, are in our collection. There appears, however, some difference in the geographical distribution of these two forms: the species of Artamus being chiefly inhabitants of the islands in the Southern Ocean, while those of Dicrurus extend their habituts from the continents of Africa and India to the neighbouring islands.

ARTAMUS. Vieill. (Ocypterus. Cur.)

1. ALBOVITTATUS. Art. fuscatus alis ardesiacis, remigibus tribus penè extimis externè albo-marginatis, rectricibus nigris, mcdiis exceptis, apice albis.

Ocypterus albovittatus. Valenciennes, Mém. du Mus. d'Hist. Nat. tom. vi. p. 23. no. 3.

The bills of this bird, and we believe of all the species of the present genus, are of a bluish or lead colour at their base, with a black *apex*. This species has hence attained the name of *Blue*-

<sup>\*</sup> No. 106, in Mr. Caley's Catalogue.

bill among the colonists. It is also called Wood Swallow, as we find in Mr. Caley's notes. That gentleman further adds:—" I have occasionally seen as many of these birds flying about in some places as I ever did Swallows, which they closely imitate in their mode of flight. This occurred where the ground had been cleared and abandoned. Their resting places were on the stumps of trees which had been felled. I do not think them migratory: if they are so, they depart for no great length of time."—A specimen in the collection was obtained by Mr. Brown at King George's Sound.

- 2. CINEREUS. Art. supernè canus subtus albidus ; fascià frontali gularique, uropygio, crisso, caudàque atris, hâc apice albo.
- Ocypterus cinereus. Valenciennes, Mém. du Mus. d'Hist. Nat. tom. vi. p. 22. no. 2.

All the specimens of this species in the collection were procured by Mr. Brown at Broad Sound, September 1802.

Genus. DICRURUS. Vieill. (Edolius. Cuv.)

1. BALICASSIUS. D. virescenti-ater, rectricibus primis extrorsúm inclinantibus.

Corvus balicassius. Linn. Syst. Nat. i. 157. Monedula Philippensis. Briss. Orn. ii. p. 31. no. 9. pl. 2. f. 1. Le Choucas des Philippines. Pl. Enl. 603. Le Drongup. Le Vaill. Ois. d'Afr. pl. 173.

We consider our bird to be the same as the species above referred to, with which it agrees in its most essential particulars, although it does not exhibit the green metallic lustre which is described as alternating with the black of that species. The bird in the Society's collection may be a young bird or a female, and thus may not show the same splendour in its colours. The spe- $2 \ge 2$  cies

cies is described as very generally diffused over the East, being found in the Philippine Islands and various parts of India.

Subfam. LANIANA. Swains.

Genus. FALCUNCULUS. Vieill.

FRONTATUS. Falc. cristatus fuscus, subtus flavus, capite colloque nigris, lateribus vittis duabus albis. Lath.
 Lanius Frontatus. Lath. Ind. Orn. p. xviii. no. 8.
 Frontal Shrike. Id. Gen. Hist. ii. p. 72. no. 86. pl. xx.
 Pie-grièche à casque. Temm. Pl. Col. 77.

2. GUTTURALIS. Falc. fusco-brunneus, subtus pallidior, fronte gulâque albis, cristà erectà guttureque nigris, crisso fulvo.

Capitis plumæ frontales albæ, proximæ nigræ, fasciam nigram formantes; cristales nigræ, basi griseæ; occipitales nuchalesque subgrisescentes. Tectrices inferiores, remigesque subtus basi albescentes. Rostrum nigrum, mandibulæ superioris apice pallido. Longitudo corporis,  $7\frac{3}{10}$ ; alæ a carpo ad remigem quartam,  $4\frac{1}{5}$ ; caudæ,  $3\frac{1}{10}$ ; rostri ad frontem,  $\frac{3}{5}$ , ad rictum,  $\frac{9}{10}$ ; tarsi,  $1\frac{3}{20}$ .

The specimen of this species in the Society's collection is in very indifferent condition, and the upper mandible has unfortunately been mutilated. We cannot therefore refer it with certainty to the present genus. From what we can judge however of the bill, it accords with that of the type of *Falcunculus*, with the exception of the notch being less strongly marked. In the characters of the wings, tail, and *tarsi*, it agrees very accurately with the present genus.

This bird was presented to the Society by Mr. Brown, and was procured by that gentleman at Kent's Group, December 1803.

Subfam.

#### Subfam. THAMNOPHILINA. Swains.

Genus. VANGA. Vieill.

1. DESTRUCTOR. V. suprà cinereo-fuscus, subtus albidus; capite, genis, remigibus, rectricibusque nigris, illis albo-strigatis, his apice albo-marginatis.

Vanga Destructor. Temm. Man. d'Ornith. p. lix. Cassican Destructeur. Id. Pl. Col. 273.

Mr. Caley thus observes on this species. "Butcher-bird.— This bird used frequently to come into some green wattle-trees near my house, and in wet weather was very noisy; from which circumstance it obtained the name of *Rain-bird*. It appeared to be a solitary bird, or at least to associate only with its mate."

Genus. COLLURICINCLA\*.

- Rostrum forte, sub-elongatum, compressum, rectum, culmine apicem versus gradatim arcuato : mandibulâ inferiori prope apicem fortiter emarginatâ : naribus ovalibus subobliquis, membrano partim clausis, setis plumulisque obtectis : rictu setis parcè instructis.
- Alæ mediocres rotundatæ : remigibus, primâ brevi, tertiâ quartâ quintâ et sextâ ferè æqualibus longissimis, septimâ breviori, secundâ et octavâ paulò brevioribus æqualibus ; tertiæ ad sextam inclusam pogoniis externis in medio paulatim latioribus.
- Pedcs mediocres, fubfortes; acrotarsiis scutellatis, paratarsiis integris; digitis mediocribus, medio longiori, halluce forti, hujus ungue subelongato forti.

Cauda subelongata, æqualis.

\* Kohhupiwv lunius, and xigxhos turdus.

This

This group, which by its straight and rather lengthened bill appears to come into the subfamily of Thamnophilina among the Shrikes, may probably be considered the representative in Australia of the South American Thannophili and the African Malaconoti. From both those genera it differs in its entirely even tail; in its wings being comparatively longer, although rounded as in those genera; and in the paratarsia being entire instead of being furnished with either large but distant, or small but numerous, scales. We have been enabled to ascertain nothing of the habits of the group: but its general appearance points out the situation we at present assign it; while at the same time it has also some general resemblance to the neighbouring family of the *Thrushes*. The present subfamily, it is to be observed, is that which connects the Laniadæ with the last-mentioned family Merulidæ: and this approaching conformity to the Thrushes in the birds which compose the extreme and connecting group of the Shrikes is therefore to be expected. We have assigned the genus a name indicative of these approaching affinities.

- 1. CINEREA. Coll. suprà cinerea, subtus pallidior, gulà regioneque anteoculari albidis, remigibus internè fuscis.
- Fœm. Subtus cinerescens, gulà nigro-striatà, rostro flavescente.
- Dorsum brunnescens. Ptila inferiora albida; pteromata inferiora cana fusco-variegata. Rostrum pedesque nigri. Longitudo corporis,  $8\frac{2}{5}$ ; alæ a carpo ad remigem quintam,  $4\frac{9}{10}$ ; caudæ,  $4\frac{1}{4}$ ; rostri ad frontem,  $\frac{7}{10}$ , ad rictum,  $1\frac{1}{20}$ ; tarsi,  $\frac{9}{10}$ .

Mr. Caley has noted these two birds as sexes of the same species. He adds, that they frequented at times the neighbourhood of his house, and were found in the green wattle-trees. The eyes he described as black. The weight of the male was  $2\frac{1}{4}$  ounces.

Genus.

# Genus. Sphecotheres. Vieill.

1. VIRIDIS. Sphec. olivaceo-viridis; gulà pectore nuchàque cineraceis; capite, genis, alulà, pteromatibus, remigibus, rectricibusque nigris; his, quatuor mediis exceptis, apice albis.

Sphecotheres viridis. Vieill. Anal. d'une Nouv. Orn. pp. 42 § 68. Graucalus viridis. Quoy et Gaimard, Voy. aut. du Monde, pl. 21. Sphecothere vert. Vieill. Gal. des Ois. p. 238. pl. 147.

M. Vieillot ranks this genus among or near the Thrushes. Its strong bill, however, inclines us to give it a station among the Shrikes; but at that extremity of the family which approaches the Thrushes. We do not see in this bird any of the leading characters of Graucalus Cuv., in which genus MM. Quoy and Gaimard have placed it. In particular, it wants those sharp and pointed feathers on the back which distinguish the birds of that In its habits perhaps, which those naturalists had the group. best opportunity of observing, it may approach Graucalus, and thus indicate the affinity which unites the present subfamily to the succeeding, of which that genus makes a part. Our specimen was presented to the Society by Mr. Brown, who met with the species in Keppel Bay, August 11th and October 21st, 1802. It differs from M. Vieillot's figure in having the back part of the neck cinereous instead of green, and the ends of the lateral tailfeathers white. Our bird may probably be the male. If it should prove to be a distinct species, it may appropriately receive the specific name of Vieilloti after the founder of the genus.

Subfam. CAMPEPHAGINA. Swains.

Genus. CAMPEPHAGA. Vieill. (Ceblepyris. Cuv.)

1. LEUCOMELA. Camp. suprà nigra, subtus alba nigro-fasciata; gulâ, pteromatum et rectricum apicibus, remigumque marginibus exterioribus albis, crisso fulvo.

Corpus

Corpus subtus fasciis gracilibus nigris undulatum. Tectrices inferiores albæ. Rostrum pedesque nigri.

The specimen of this bird in the Society's collection is in such indifferent condition that we cannot enter further into the details of its characters than the above few remarks. The tail is particularly defective; and we can determine little respecting the proportions of the species, but that the body from the apex of the bill to the root of the tail is  $3\frac{1}{2}$  inches in length. The bird was found by Mr. Brown at Broad Sound, October 26th, 1802.

Genus. GRAUCALUS. Cuv.

1. MELANOPS. Grauc. cinereus, fronte gutture remigibus rectricibusque, mediis exceptis, nigris, harum apicibus crissoque albis.

Corvus melanops. Lath. Ind. Orn. Supp. p. xxiv. no. 1. Ceblepyris melanops. Temm. Manuel. p. lxii. Rollier à masque noir. Le Vaill. Ois. de Paradis, &c. pl. 30.

Mr. Caley says of this bird, that it may generally be seen on the tops of high dead trees. He does not consider it migratory. One of his specimens is marked "male," and a second "female."

2. PAPUENSIS. Grauc. cinereus, gutture pectore abdomineque albis graciliter fusco transversim undulatis; strigâ latâ per oculos, pteromatibus remigibus rectricibusque nigris, harum apice albis.

Corvus Papuensis. Gmel. i. 371. Choucari de la Nouvelle Guinée. Pl. Enl. 630. Papuan Crow. Lath. Gen. Hist. iii. p. 45. no. 42.

M. Temminck unites these two last birds as different sexes of the same species: the latter being the female. We know not upon what authority he has founded this opinion. We must however observe,

serve, that the only specimen of the G. Papuensis in the Linnean collection, collected by Mr. Caley, is marked by that gentleman as a male; while a specimen of the G. melanops is noted as a female. Time will clear away the difficulties that attend such points. At present we can only state the doubts which exist on the subject.

- 3. MENTALIS. Grauc. fuscescenti-ciuereus, subtus pallidior; tæniâ gracili frontali per oculos extendente, maculis gularibus, remigibus, rectricibusque nigris; mento, crisso, rectricumque apicibus albis.
- Regio parotica nigra. Gula summumque pectus nigro-sparsæ. Remiges internè ad basin albæ, externè graciliter albomarginatæ. Tectrices inferiores albæ. Rectrices, mediis exceptis, internè graciliter albo-marginatæ, apicibus albofasciatis, externarum fasciis gradatim latioribus. Rostrum pedesque fusco-nigri. Longitudo corporis,  $9\frac{1}{2}$ ; alæ a carpo ad remigem quartam,  $6\frac{1}{5}$ ; rostri,  $\frac{9}{10}$ ; caudæ, 5; tarsi,  $\frac{9}{10}$ .

The bird described above exhibits so many points of distinction from the preceding species, that we have ranked it as separate. Its locality also, which is different from that of the other species, serves to strengthen us in this opinion. The chief difference consists in the inferior size of our bird, all the specimens we have seen of the former species being about thirteen inches in length; in the darkness of the ash-colour on the back; in the narrowness of the frontal band, and particularly in the white colour of the *mentum*. There is, however, much variation, as is alleged, in the *Grauc. melanops* and *Papuensis*; and it may happen that our bird is but the young of one of those species.—Our specimen was found on the South Coast by Mr. Brown in 1803.

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Fam.

Fam. MERULIDÆ.

Subfam. MYIOTHERINA. Swains.

Genus. PITTA. Vieill.

1. BRACHYURA. Pit. viridis, subtus ferrugineo-fulva; tæniå superciliari pallidè fulvå; capite, pteromatibus, remigibus, caudâque ad apicem ferè, nigris; gulâ maculâque alarum albis; ptilis uropygioque cæruleis, maculâ mediâ abdominali crissoque coccineis.

Corvus brachyurus, var. n? Lath. Ind. Orn. p. 166. no. 43. Short-tailed Crow, var. F? Id. Gen. Hist. iii. p. 68. no. 71.

We have great doubts whether this bird and all the other varieties, described by Dr. Latham as belonging to this species, are varieties only. We have not, however, sufficient grounds to make any decided observations on the subject.

Subfam. MERULINA.

Genus. TURDUS. Linn. et Auct.

1. VARIUS. T. castaneo-testaceus, pennis apice perfuscis, remigibus fuscis externè castaneo-testaceis, abdomine albido, latcribus castaneo et nigro variis, rectricibus subtus fuscescentibus, crisso albido nigroque tenuiter fasciato. Horsf. in Linn. Trans. vol. xiii. p 149.

Turdus varius. Horsf. Zool. Researches in Java.

In the general characters of the bill, wings and legs, and in the disposition of its colours, this species accords sufficiently well with the European group of the genuine *Turdus* to authorize us to refer it to that genus. We must however observe, that in the few specimens which we have seen of the bird, the under mandible is considerably shorter than the upper. Whether this

this inequality is owing to the manner in which the skins have been prepared, or whether it is natural, is not for us to determine. The present individual is the only specimen Mr. Caley ever met with: it was much shattered by the contents of his gun.

Subfam. Cossyphina.

Genus. CINCLOSOMA\*.

- Rostrum subgracile, subrectum; culmine rotundato, apice gradatim leviterque arcuato; maudibulà superiori apice emarginatà: naribus basalibus, linearibus, membranà partim tectis, setis parcè opertis; rictu parcè setis instructo.
- Alæ breves, rotundatæ; remige primå brevi, tertiå quartå et quintå ferè æqualibus longissimis, secundå et sextå brevioribus; tertiæ quartæ et quintæ pogoniis externis prope medium emarginatis.
- Pedes subelongati, fortes ; acrotarsiis scutellatis, paratarsiis integris ; digitis mediocribus, halluce subforti, ungue subelongato, subforti.

Cauda elongata, gradata.

The birds of this genus appear to belong to that subdivision of the *Thrushes*, which by the weaker conformation of the bill opens a passage to the slender-billed *Warblers*. They deviate very considerably from the typical form of the *Merulidæ*. Besides the more gracile shape of the bill, the *nares* may be observed to be linear and longitudinal, instead of being rounded, as in the true *Turdi*. The wings are short and rounded, the first quillfeather being of moderate length, and the next gradually increasing; they thus differ from the wings of *Turdus*, where the four quill-feathers succeeding the first are nearly of equal length,

\* Kiyxlos turdus, and owna corpus.

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and

and the first almost spurious. The tail is long and graduated, which in the true *Thrushes* is even; and the scales on the *acrotarsia* are strongly conspicuous, while the *tarsi* of the *Thrushes* are entire.

The genus appears very nearly allied to *Timalia*, Horsf., in its general conformation. But it does not possess the elevated *culmcn* of the bill so conspicuous in that group; nor is the disposition of the quill-feathers the same. In these respects *Timalia* comes nearer to *Turdus*, Auct. The *tarsi* of our genus appear somewhat more elevated than is usual in this family; and from what Mr. Caley says of the habits of the birds which compose the type of the group, we conjecture that they indicate the approach of the present subfamily to the *Rock* and *Ground Thrushes*, which form the next succeeding divisions of the extensive group of *Merulidæ*.

1. PUNCTATUM. Cinc. supra fusco-brunneum fusco-nigro strigatum; tæniå superciliari, maculå utrinque longitudinali gutturali, punctis tectricum, apicibus rectricum, abdomineque medio, albis; gulå, juguli medio, maculis pectoralibus lateralibus crissique nitescenti-nigris; pectore griseo.

Fœm. Gulà maculisque gutturalibus ferrugineo-lutcis. Turdus punctatus. Lath. Ind. Orn. Supp. p. xliv. no. 23. Punctated Thrush. Id. Gen. Hist. v. p. 130. no. 169.

Mr. Caley says, that the weight of the male was 4 ounces. He adds: "This species is by no means plentifully to be met with." It inhabits the small forest scrubs, and is frequently started from the ground. It appears to be more constantly on the ground than in the trees, taking a short flight on being disturbed, and then again alighting on the ground a little further off."

Fam.

Fam. SYLVIADÆ.

Genus. MALURUS. Vieill.

\* Rectricibus haud decompositis.

1. CYANEUS. Mal. capite tæniå suboculari lunulâque subnuchali sericeo-cæruleis; strigå ante poneque oculos nuchâ gutture pectore dorsoque sericeo-nigris, abdomine albo, remigibus rectricibusque brunnescenti-fuscis, caudâ rotundatâ.

Fœm. Suprà fuscescenti-brunnea, subtus albida, caudâ subrotundatâ.

Motacilla cyanea. Gmel. i. 991. no. 165.

Sylvia cyanea. Lath. Ind. Orn. p. 545. no. 142.

Superb Warbler. Phillips's Bot. Bay, pl. at p. 157, 8. p. 159, 9.
 White's Journ. pl. at p. 256. fig. sup. Lath. Gen. Hist. vii.
 p. 117. no. 128. pl. 106.

In Mr. Caley's notes we find the following observations on this species :—" These birds, at least the brown ones, were very common about Paramatta, particularly in my garden, where they came frequently hopping about in the hedges, or among the pea-sticks : but I think I may safely say that there was not one blue one amongst a hundred of them. They are gregarious and polygamous to appearance, unless I have been deceived by the young birds possessing the plumage of the female. They are very good songsters, and I may say almost the only ones in the colony.—The *irides* are black.

2. LAMBERTI. Mal. capite strigâ subauriculari ad nucham extendente dorsoque medio sericeo-cæruleis; gulâ gutture pectore nuchâ dorso inferiori uropygioque sericeo-nigris, scapularibus rufo-brunneis, abdomine albo, remigibus rectricibusque brunnescenti-fuscis, caudâ gradatâ.

Fœm. Brunnescenti-fusca, subtus albida, caudâ subgradatâ.

Capitis

Capitis dorsique color cæruleus saturatior quàm in Mal. cyaneo, occipitis in brunneum vergens. Tectrices inferiores albidæ. Rectrices brunnescenti-fuscæ, cæruleo-nitentes. Rostrum nigrum. Pedes flavescentes. Longitudo corporis,  $5\frac{1}{2}$ ; alæ a carpo ad remigem quartam,  $1\frac{4}{5}$ ; caudæ,  $3\frac{1}{5}$ ; rostri ad frontem,  $\frac{7}{20}$ , ad rictum,  $\frac{9}{20}$ ; tarsi,  $\frac{9}{10}$ .

Superb Warbler, var. White's Journ. pl: at p. 256. fig. inf.

In honorem AYLMER BOURKE LAMBERT, Armigeri, Societatis Linneanæ PRO-PRESIDIS, &c. Botanici eximii, Zoologiæque præsertim studiosissimi, hæc avis superba nomen accipiat.

These two last birds have long been considered varieties of the same species, and have been figured as such in *White's Journal*. Independently, however, of the difference between the two birds in their colours, and in the distribution of them, we may observe, that the tail of the latter bird is much more graduated than that of *Mal. cyaneus*; while the under wing-coverts are whitish, which in *Mal. cyaneus* are rufous.

- 3. LEUCOPTERUS. Mal. capite cristato corporeque intensè azureis, scapularibus alarumque tectricibus fuscis, his azureonitentibus.
- Malurus leucopterus. Quoy et Gaimard, Voy. autour du Monde, pl. 23. f. 1.

This beautiful bird was presented to the Society by Mr. Brown, who met with it on the South coast of New Holland.

4. MELANOCEPHALUS. Mal. capite collo antico pectoreque brunnescenti-nigris, dorso coccineo, remigibus rectricibusque brunneis, abdomine albescente.

Muscicapa melanocephala. Lath. Ind. Orn. Supp. p. lii. no. 16. Orange-rumped Warbler. Id. Gen. Hist. vii. p. 124. no. 137.

5. BROWNII.

- 5. BROWNII. Mal. capite subcristato collo antico tectricibus alarum rectricibusque nigris, dorso coccineo, remigibus fuscobrunneis.
- Tectrices suprà nigræ, inferiores fulvescentes. Remiges fuscobrunneæ subtus pallidiores. Rostrum nigrum. Pedes flaves
  - centes. Longitudo corporis,  $3\frac{7}{10}$ ; alæ a carpo ad remigem quartam,  $1\frac{3}{5}$ ; caudæ,  $1\frac{4}{5}$ ; rostri,  $\frac{2}{5}$ ; tarsi,  $\frac{3}{4}$ .
- In honorem ROBERTI BROWN, Armigeri, Societatum Regiæ et Linneanæ, Socii, &c. Botanicorum principis, qui Museum Linneanum avibus Navæ Hollandiæ propriis pretiosissimis ditavit, hæc species perpulchra nominatur.

This species is very nearly allied to *M. melanocephalus* in the general disposition of the colours. It differs, however, in the black being more intense, and covering the whole of the under parts, the tail being darker, and the size of the bird much smaller. The bill also is black, which is of a pale-yellowish colour in the preceding species. It is marked by Mr. Brown, to whom the Society is indebted for the specimen, as having been obtained at the Bay of Inlets, near the inner entrance of Thirsty Sound, Sept. 1802.

- 6. Exilis. Lath. MSS. Mal. supernè rufo-brunneus, strigis latis fuscis ornatus, subtus pallidior; remigibus rectricibusque fuscis, his apice albido.
- Capitis dorsique plumæ in medio fuscæ. Tectrices inferiores rufescenti-albidæ. Rectrices fuscæ, prope apicem albidum saturatiores, brunneo-rufo marginatæ; subtus grisescentes, maculâ nigrâ prope apicem albidum instructæ. Rostrum pedesque flavescentes. Irides avellaneæ. Longitudo corporis, 4; alæ a carpo ad remigem quartam, 1<sup>7</sup>/<sub>10</sub>; caudæ, 1<sup>7</sup>/<sub>10</sub>: rostri, <sup>1</sup>/<sub>2</sub>; tarsi, <sup>4</sup>/<sub>5</sub>. Longitudo corporis Fæminæ, 3<sup>7</sup>/<sub>10</sub>.
  Exile Warbler. Lath. Gen. Hist. vii. p. 136. no. 165.

\*\* Rec-

\*\* Rectricibus decompositis.

# 7. MALACHURUS. Mal. ferrugineo-brunneus, fusco-strigatus, subtus pallidior, strigâ ante oculos superciliisque pallidè cæruleis, gulâ guttureque griseis, rectricibus decompositis.

Fæm. Gulå guttureque ferrugineis.

Muscicapa malachura. Lath. Ind. Orn. Supp. p. lii. no. 15. Soft-tailed Flycatcher. Linn. Trans. iv. p. 242. pl. 21.

"This bird," Mr. Caley observes, "is called *Emu Bird* by the colonists. The native name is *Wawguljelly*. I have never known it called *Merion Binnion*, as published in the Linnean Society's Transactions. The native name of an *Emu* is *Murring*. The species is an inhabitant of scrubs, which are principally composed of different kinds of *Banksia*, particularly where the ground is moist or inclining to be marshy. The natives tell me it may be run down.—It has a small shining black eye, with a hazel-brown *iris*."

### Genus. ACANTHIZA\*.

- Rostrum gracile, breve, rectum, basi subdepressum, apice compressum, culmine apicem versus leviter arcuato; mandibulâ superiori subemarginatâ; naribus linearibus, longitudinalibus, supra membranâ tectis, setis plumulisque partim opertis; rictu setis parcè instructo.
- Alæ subbreves, rotundatæ ; *remige* primå brevi, secundå et tertiå gradatim longioribus, quartå longissimå, secundå et decimå æqualibus.

Pedes graciles, acrotarsiis paratarsiisque integris. Cauda mediocris, apice subrotundata.

This group is closely connected with that of *Malurus*. The construction of the wings and legs is the same, and their habits, as far as we can learn, are similar. But the soft, lengthened,

\* Axavlew dumetum, and Zaw vivo.

and

and graduated tail, which gives a striking character to the typical species of *Malurus*, is wanting in the present group, in which the tail is short and rounded; in some species, indeed, inclining to become even. Both groups have a bill which partakes of the character of that of the *Muscicapidæ*, and which has caused some species among them to be referred to that family. But the bill of our group is rather more depressed at the base, is shorter and less arcuated than that of *Malurus*. In all these points, however, the two groups approach each other so nearly in some of the extreme species, that it is difficult to draw the line of distinction between them. As in all similar cases of groups thus approximating to each other, we fix our attention on the typical species chiefly of each, which in the present instance may be considered to be *Malurus Lamberti* and *Acauthiza pusilla*.

In reference to the European groups of this family, these two forms of the New Holland Warblers appear to approach them more nearly than any other extra-European species. The wings are formed upon the same model, the first quill-feather being short, although not so much so as in the typical species of Europe. The integrity of the tarsi, however, the uneven tail, and the rictus of the bill partially beset with bristles, and approximating to that of the Flycatchers, sufficiently point out a distinction. Of all the European Sylviadæ, they resemble most nearly the group of Regulus, Cuv.: they want, however, the singular plume which covers the nostrils of that genus. The species which we have met with possess a general similarity in the disposition of their colours; and they appear to be distinguished by the character of having the webs of their feathers, particularly about the head and neck, more than usually loose and decomposed. Like the Reguli they appear to be the inhabitants of bushes and low scrubs.

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1. NANA.

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226 Mr. VIGORS'S and Dr. HORSFIELD'S Description of the

- 1. NANA. Acant. viridescenti-olivacea, subtus flava, fronte genisque albescenti-flavis, remigibus caudâque olivaceo-fuscis, hâc prope apicem nigro-fasciatâ.
- Genarum plumarum rhaches albidæ. Tectrices inferiores albidæ. Rostrum pedesque flavescentes. Longitudo corporis,  $3\frac{3}{5}$ ; alæ a carpo ad remigem quartam,  $1\frac{9}{10}$ ; caudæ,  $1\frac{3}{10}$ ; rostri,  $\frac{7}{20}$ ; tarsi,  $\frac{13}{20}$ .

Dwarf Warbler, var. A? Lath. Gen. Hist. vii. p. 134. no. 161.

We are informed by Mr. Caley that these birds were found in the green wattle-trees about his house in great numbers. The irides are gray.

- 2. REGULOIDES. Acant. suprà viridi-olivacea, subtus flavescentialbida; fronte sincipitisque parte anteriori ferrugineo notatis, uropygio caudæque basi apiceque fulvo-luteis, hâc medio nigrâ.
- Frontis sincipitisque plumæ in medio ferrugineæ, apice fuscomarginatæ. Tectrices inferiores albidæ. Rostrum brunnescens, parte inferiori pallescente. Pedes flavescentes. Irides griseæ. Longitudo corporis,  $3\frac{3}{4}$ ; alæ a carpo ad remigem quartam, 2; caudæ,  $1\frac{1}{2}$ ; rostri,  $\frac{7}{20}$ ; tarsi,  $\frac{7}{10}$ .

Dwarf Warbler, var. B? Lath. Gen. Hist. vii. p. 135. no. 161.

This species was met with by Mr. Caley in the same situation as the last. Some specimens also in the collection were brought home by Mr. Brown from Port Jackson, where he obtained them in August 1803.

- 3. FRONTALIS. Acant. fusco-brunnea, subtus pallidior; fronte, gulâ, pectoreque albis, uropygio rufescente.
- Remiges rectricesque brunneo-fuscæ, subtus grisescentes. Tectrices inferiores albidæ. Rostrum pallidè fuscum, subtus flavescens. Pedes flavescentes. Longitudo corporis,  $4\frac{1}{4}$ ; alæ a carpo ad remigem quartam,  $2\frac{3}{10}$ ; caudæ,  $1\frac{9}{10}$ ; rostri,  $\frac{9}{20}$ ; tarsi,  $\frac{3}{4}$ . Variat corpore grandiore.

4. Pyr-

- 4. PYRRHOPYGIA. Acant. fusco-brunnea, subtus albida; uropygio rufo, caudá fasciá subapicali nigrá, apice albido.
- Remiges pogonio interno fuscescentes, subtus fuscæ. Rectrices. duæ mediæ totæ fusco-brunneæ, cæteræ apice albido; subtus fusco-cinereæ, versus apicem saturatiores, apice albido. Rostrum pedesque flavescentes. Longitudo corporis,  $4\frac{9}{10}$ ; alæ a carpo ad remigem quartam,  $2\frac{3}{10}$ ; caudæ,  $2\frac{1}{4}$ ; rostri,  $\frac{1}{2}$ ; tarsi,  $\frac{19}{90}$ .

This species has a tail more elongated, and somewhat more graduated than the typical species of the genus. In its other external characters and in the disposition of the colours it sufficiently accords with the group. By the characters of its tail it appears to approach the Maluri; and with Malurus exilis, a species described above, it may be said to form a passage betweenthese two closely-allied groups\*.

\* We take this opportunity of inserting two species of this genus, which are not in the Society's collection.

5. PUSILLA. Acant. fusco-brunnea fronte fulvo-variegatâ, subtus albida, gutture pectoreque fusco-striatis, uropygio rufescente, rectricibus in medio fusco-fasciatis, apice pallido.

Motacilla pusilla. White's Journ. pl. in p. 257. Dwarf Warbler. Lath. Gen. Hist. vii. p. 134. no. 161. In Mus. Societatis Zoologicæ.

- 6. BUCHANANI. Acant. suprà olivaceo-viridis, capitis parte anteriori albo-lineato, subtus albida, gutture pectoreque fusco-lineatis; rectricibus nigris, uropygio coccineo.
- Frontis sincipitisque partis anterioris plumarum rhaches albæ. Lora alba. Remiges brunneo-fuscæ, subtus pallidiores. Tectrices inferiores albæ. Rectrices nigræ, exteriores pallidiores, subtus fuscescentes. Rostrum fuscum. Pedes flavescentifusci. Longitudo corporis,  $4\frac{1}{10}$ ; alæ a carpo ad remigem quartam, 2; caudæ,  $1\frac{4}{5}$ ; rostri, 2; tarsi, 3.

In Mus. Dom. Buchanan.

In honorem GUALTERI BUCHANAN, Armigeri, Societatis Linneanæ Socii, Zoologiæ studiosissimi, hanc speciem nominavimus. 2 G 2

Genus.

Genus. MEGALURUS. Horsf.

1. CRURALIS. Meg. pallidè murino-brunneus; maculis anteocularibus, gutturalibus, abdominalibusque fusco-brunneis; crisso fusco-striato, plumarum auricularium rhachibus albis.

Dorsum brunneo saturatiore nebulosum. Remiges pallido-rufo externè marginatæ; subtus basi albidæ, ad apicem grisescentes. Tectrices inferiores fusco-brunneæ. Rectrices subtus grisescentes. Rostrum brunnescens. Pedes pallidè brunnei. Irides griseo-brunneæ. Longitudo corporis,  $8\frac{1}{2}$ ; alæ a carpo ad remigem tertiam,  $4\frac{9}{5}$ ; caudæ,  $3\frac{17}{20}$ ; rostri ad frontem,  $\frac{11}{20}$ , ad rictum,  $\frac{19}{20}$ ; tarsi,  $1\frac{1}{2}$ ; hallucis, ungue incluso,  $1\frac{1}{5}$ .

"These birds," as is observed by Mr. Caley, "are birds of passage. They appear in no great numbers. They alight on the tops of dead trees. The note is loud and harsh."

2. GALACTOTES. Meg. rufo-brunneus, fusco-brunneo strigatus, subtus albidus, rectricum rhachibus fusco-brunneis. Malurus Galactotes. Temm. Pl. Col. 65.

This bird has been placed by M. Temminck among the Maluri; but the strength of its formation with respect to its bill, legs, and tail, by no means accords with the characters of those birds. It belongs more properly to Megalurus, although not exactly agreeing with the typical species; its structure being weaker in comparison with them, as it is stronger with respect to the Maluri. It seems to indicate a passage between the two groups. 'The specimens in the collection were obtained by Mr. Brown at Broad Sound, near the upper head, October 24th, 1802.

Genus.

## Genus. ANTHUS. Bechst.

- 1. AUSTRALIS. Ant. suprà rufo-brunneus, fusco-brunneo variegatus, subtus fulvo-albidus strigis fusco-brunneis; maculà superciliari fulvâ, gulà albâ, remigibus rectricibusque brunneofuscis, harum duabus exterioribus albo-marginatis.
- Capitis dorsi scapularium tectricumque plumæ in medio longitudinaliter fusco-notatæ. Pectoris abdominisque plumæ in medio brunneo graciliter strigatæ; crissi albescentis similiter strigatæ. Remiges subtus pallidiores, internè ad basin albescentes. Tectrices inferiores pallidè fulvæ. Rectrices duæ externæ albæ, pogonio interno brunneo-fusco marginatæ; primarum rhachibus ad basin albis, ad apicem brunneis; secundarum totis brunneis: duæ mediæ fulvo-marginatæ. Rostrum brunneo-fuscum, subtus ad basin pallescens. Pedes flavescentes. Longitudo corporis, 6; alæ,  $3\frac{1}{2}$ ; caudæ,  $2\frac{17}{20}$ ; rostri,  $\frac{3}{5}$ ; tarsi,  $1\frac{1}{20}$ .

Mr. Caley says that "this *Lark* is very common. It may frequently be seen both in the trees and on the ground. Having met with it in the height of summer and the depth of winter, and indeed I may almost say at all times, I consider it not migratory." A specimen in the collection presented by Mr. Brown was obtained on the South Coast.

- 2. PALLESCENS. Ant. suprà pallido-rufo brunneoque varius, subtus albidus, pectore brunneo parcè maculato; remigibus rectricibusque fusco-brunneis, harum duabus exterioribus albo-marginatis.
- Capitis dorsi tectricumque plumæ in medio fusco-brunneæ, ad margines pallidè rufæ. Remiges rufo-marginatæ, subtus grisescentes, internè pallidiores. Tectrices inferiores pallidæ. Rectrix

Rectrix prima alba, pogonio interno brunneo-marginato; secunda alba, strigâ mediâ, rhachin includente, margineque interno brunneis. Rostrum pedesque flavescentes. Longitudo corporis,  $4\frac{4}{5}$ ; alæ, 3; caudæ,  $1\frac{9}{10}$ ; tarsi,  $1\frac{1}{20}$ .

- 3. MINIMUS. Ant. suprà viridi-olivaceus, fusco varius, capite brunneo albido-strigato; subtus viridiscenti-albus brunneostriatus; rectricibus, mediis exceptis, brunnescenti-nigris apice albis.
- Capitis plumæ brunneæ, strigâ mediâ albâ, rhachin includente, notatæ. Dorsi tectricumque plumæ in medio fuscæ, ad margines viridi-olivaceæ; uropygii ad viridi-flavum inclinantes. Remiges fuscæ, subtus pallidiores. Tectrices inferiores fuscæ. Rectrices duæ mediæ viridi-olivaceæ; cæteræ basi brunnescenti-nigræ apicem versus saturatiores, apicibus albis. Rostrum pedesque pallidi. Longitudo corporis,  $3\frac{9}{10}$ ; alæ  $2\frac{3}{10}$ ; caudæ,  $1\frac{9}{10}$ ; rostri,  $\frac{2}{5}$ ; tarsi,  $\frac{3}{10}$ .
- 4. FULIGINOSUS. Ant. suprà viridi-olivaceus, subtus pallidior, nigro-strigatus; remigibus rectricibusque pallidè brunneis, his nigro-fasciatis apice albido.
- Corporis plumæ in medio nigro-strigatæ. Remigum pogonia externa pallidè marginata. Caudæ fascia sublata prope apicem nigra. Longitudo corporis, 4 ; alæ,  $2\frac{1}{2}$  ; caudæ,  $1\frac{7}{10}$  ; rostri,  $\frac{1}{2}$  ; tarsi, 1.

This bird was procured by Mr. Brown at Van Diemen's Land in 1804.

5. RUFESCENS. Ant. pallidè brunneus, fusco-brunneo nebulosus, subtus pallidior; gulà albidà, uropygio rufescente, remigibus caudàque brunnescentibus.

Corporis superioris plumæ in medio fusco-brunneæ. Remigum pogonia

pogonia externa albido-marginata. Tectrices inferiores albidæ parcè nigro notatæ. Longitudo corporis,  $6\frac{1}{5}$ ; alæ,  $3\frac{9}{10}$ ; caudæ,  $2\frac{9}{10}$ ; rostri,  $\frac{7}{10}$ ; tarsi,  $1\frac{1}{10}$ .

The birds of the group just described which are in our collection are in general in bad condition, and we have been obliged to confine ourselves to a few details only of their characters. Even still we are not satisfied with our distinguishing marks. The last species in particular is very doubtful, and we are not quite certain that it even belongs to this genus.

### Genus. DASYORNIS\*.

- Rostrum forte, subarcuatum, culmine carinato, mandibulâ superiori vix emarginatâ; naribus basalibus, ovalibus, longitudinalibus, membranâ suprà partim tectis.
- Alæ breves, rotundæ : remige primå subbrevi, secundå tertiå et quartå gradatim longioribus, quintå sextå et septimå ferè æqualibus longissimis, cæteris gradatim decrescentibus.

Cauda elongata, gradata.

Pedes subfortes, mediocres; halluce forti, ungue subelongato, arcuato; acrotarsiis scutellatis, paratarsiis integris.

Regio anteocularis vibrissis recumbentibus fortibus instructa. Corporis plumarum pogonia decomposita.

This genus bears a very close resemblance to the group of *Timalia* of the Javanese ornithology. In the shortness and roundness of the wings, in the length and graduation of the tail, in the carinated bill, and in the loose and decomposed feathers of the body, it comes so close to that group that we should at once refer our species to it, were it not for the singular bristles that spring from the front of the forehead above the bill, and form

\* Darus hirsutus, and opvis aris.

a strongly

• a strongly distinguishing character. The Motacilla Africana, Gmel., Le Fluteur of M. Le Vaillant, belongs to this group. In that bird the frontal bristles are not so long as as in our bird, but they are more numerous, and equally strong. We do not feel quite satisfied as to the situation of the group. We have some grounds for thinking that with Timalia it may rather be referred to that place among the Thrushes where the species gradually pass into the Warblers, than to the present situation. At the same time, it shows some resemblance to Megalurus, Horsf., and perhaps to Malurus, Vieill.; in which last genus M. Temminck would decidedly place it according to the mode in which he has undertaken to enlarge that group. We wait for further knowledge of the habits of the species to enable us to determine this point.

- 1. AUSTRALIS. Das. suprà fusco-brunneus, subtus pallidior; jugulo abdomineque medio albido, remigibus rectricibusque rufo-brunneis.
- Remiges rectricesque subtus fuscescentes. Tectrices inferiores fusco-brunneæ. Rostrum pedesque pallidi. Longitudo corporis,  $7\frac{1}{2}$ ; alæ a carpo ad remigem sextam,  $2\frac{9}{10}$ ; caudæ,  $3\frac{4}{5}$ ; rostri ad frontem,  $\frac{11}{20}$ , ad rictum,  $\frac{3}{4}$ ; tarsi,  $\frac{9}{10}$ .

This bird Mr. Caley procured in a scrubby place on the north side of Paramatta. He was able to ascertain nothing of its habits. He calls it in his notes "*Bristle Bird*."

#### Genus. GRALLINA. Vieill.

1. MELANOLEUCA. Grall.nigra; fronte, gulâ, strigâ postoculari, torque nuchali, abdomine, strigâ latâ longitudinali alarum, uropygio, remigum secundariarum apicibus, caudæque basi e: apice albis.

## Grallina

Grallina melanoleuca. Vieill. Anal. d'une Nouvelle Orn. pp. 42. § 68.

La Gralline noire et blanche. Id. Gal. des Ois. pl. 150.

We feel much uncertainty respecting the natural station of this genus of M. Vieillot. That gentleman places it in the same division with the Thrushes, next to his genus Psaroidos (Pastor, Temm.); and from the size of the typical species and its general appearance, such a situation may be assigned it with much probability of being near the truth. Our specimens, both of this species and of the next, which seems to belong to the same group, are not in sufficiently good condition to enable us to come to any decided opinion on this point. But as far as we can judge from the general characters of the bird before us, it strikes us that it bears a very great resemblance to the group of Enicurus, Temm., which belongs to the neighbouring Island of Java, and which is closely allied to the true Motacilla or the Wagtails of Authors. The length of the legs, the depression of the bill, and the general disposition of the colours, afford us some grounds for such a supposition. We leave it in this place provisionally for the present, until more perfect specimens are before us, and some knowledge of the habits and anatomy of the birds points out with certainty their station in nature.

Our specimen was procured by Mr. Brown at Port Jackson in 1802.

2. BICOLOR. Gral. nigra, dorso albo-variegato; scapularibus, strigâ humerali, fasciâ mediâ alarum, abdomine caudæque basi albis.

Caput collumque intensè nigra, colore nigro in medium pectus angulariter descendente. Remiges suprà nigræ, subtus pallidè fuscæ; tertiæ ad sextam inclusam pogonia interna, cæterarum, duabus intimis exceptis, pogonia utrinque fasvol. xv. 2 11 cià ciâ albâ instructa, fasciam albam elongatam, alis patentibus, exhibentia : secundariarum margines et apices albo-notati. *Tectrices* inferiores albæ, nigro variegatæ. *Rectrices* duæ mediæ totæ nigræ; quinta ad basin externè alba; cæteræ ad basin utrinque albæ, ad apicem fasciâ pergracili albâ marginatæ. *Rostrum* nigrum. *Pedes* pallidè fuscæ. Longitudo corporis,  $5\frac{1}{20}$ ; alæ a carpo ad remigem quartam,  $3\frac{19}{20}$ ; caudæ,  $3\frac{1}{10}$ ; rostri ad frontem,  $\frac{1}{2}$ , ad rictum,  $\frac{7}{10}$ ; tarsi, 1.

This species resembles the preceding in its general characters, and in the disposition of its colours. It differs much in size. But from its accordance in more material points we do not hesitate to refer it to the same group.

The specimen in the collection was met with by Mr. Brown near Prospect Hill.

#### Genus. Zosterops\*.

- Rostrum mediocre, gracile, arcuatum; mandibulá superiore vix emarginatà; naribus basalibus, linearibus, longitudinalibus, membranà suprà tectis, rictu inermi.
- Alæ mediocres; remigibus primå et quintå ferè æqualibus, secundå tertiå et quartå paulò longioribus, ferè æqualibus, primariis secundarias paululum longitudine superantibus.

Pedes subfortes, subelongati ; acrotursiis scutellatis.

Cauda æqualis.

Caput gracile, concinnum; plumulis periopthalmicis subsericeis albis cingulum subprominentem efformantibus.

The true Sylvia, if we select the slenderly-formed Warblers of Europe, such as the Motacillæ hippolais, trochilus, &c. Linn., as the types of the genus, are set apart from almost all the other species of the family by the formation of their wing, in which the first quill-feather is extremely short, in some instances, in-

\* Zwotnp cingulum, and of oculus.

deed,

deed, almost spurious. Of the foreign groups of the family we have already observed that the New Holland genera Malurus and Acanthiza come nearest the European type by the same construction of the wing. The present group essentially differs The first quill-feather is long, almost equal to the from it. second, which together with the third and fourth,-all of them nearly of a length,-are the longest. The nures also are linear and longitudinal, thus differing from the oval form of the Euro-In other respects the characters of these two groups pean type. have a general accordance. Besides the disposition of the wing-feathers, we may also mention the scutellation of the tarsi, the even tail, and the unarmed rictus, as additional marks of distinction from the before-mentioned New Holland Sylviadæ. From the genus Hylophilus of M. Temminck, which has lately been separated with much judgement from the Sylvia of Dr. Latham, and which also has the first quill-feather elongated and nearly even with the rest, our present group may readily be distinguished by a much more gracile and arcuated bill, in which the nares also are of a different construction. The Motacilla Maderuspatana of Linnæus, (Sylvia Madagascariensis, Lath.), belongs to our group, which seems to have a very wide dispersion.

1. DORSALIS. Zost. flavescenti-viridis, dorso cinereo, strigâ ante subtusque oculos nigrâ; subtus flavescenti-albidus, gutture pallidê flavo, abdominis lateribus ferrugineo tinctis.

Remiges rectrices que fuscæ, flavescenti-olivaceo marginatæ, subtus pallidiores. Tectrices alarum inferiores albidæ. Orbitæ plumulis albis vestitæ. Rostrum pedes que flavescenti-fusci. Longitudo corporis, 4<sup>3</sup>/<sub>5</sub>; alæ a carpo ad remigem tertiam, 2<sup>3</sup>/<sub>10</sub>; caudæ, 1<sup>9</sup>/<sub>10</sub>; rostri ad frontem, <sup>2</sup>/<sub>5</sub>, ad rictum, <sup>1</sup>/<sub>20</sub>; tarsi, <sup>3</sup>/<sub>4</sub>. Sylvia annulosa, var. β. Swains. Zool. Illust. pl. 16.

This species differs from the *Motacilla Maderaspatana*, Linn., chiefly by the griseous band which covers the back, and the less extent and depth of colour of the black mark which is found before and under the eye. Mr. Caley has not noticed the habits of this bird, beyond its having built its nest in a *mulberry-tree* close to his house.

## Genus. SAXICOLA\*. Bechst.

- 1. SOLITARIA. Sax. suprà fusco-brunnea, fronte, pectore, abdomineque ferrugineo-rufis; gulà albidà.
- Frontis plumæ pallidè ferrugineæ, gulæ albidæ. Tectrices inferiores ferrugineo-rufæ. Remiges internè ad basin rufescentes; subtus pallidè fuscæ. Rectrices suprà fusco-brunneæ, subtus brunneo-fuscæ. Rostrum pedesque pallidè fusci. Irides avellaneæ. Longitudo corporis, 5; alæ a carpo ad remigem quartam,  $2\frac{3}{3}$ ; caudæ,  $1\frac{1}{2}$ ; rostri ad frontem,  $\frac{1}{2}$ ; ad rictum,  $\frac{7}{10}$ ; tarsi,  $\frac{17}{20}$ .

\* We adjoin the following description of a New Holland bird of this genus, which has been kindly sent to us by Mr. Buchanan of this Society.

- 2. JARDINII. Sax. nigrescenti-grisea, abdomine albo; alis rectricibusque nigris, illis albo-fasciatis, his, mediis exceptis, fasciá in medio latâ, ad apicem gracili, albâ notatis.
- Caput thoraxque nigrescentes; illo griseo, hoc albo parcè sparsis: hujus color nigrescens in pectus descendit, semilunam efformans. Ptila grisescentia. Remiges prima et secunda totæ nigræ; tertia internè ad basin albo-marginata; quarta quinta et sexta internè albo marginatæ inque medio fasciatæ; cæteræ utrinque in medio albo-fasciatæ: subtus fuscæ, albo, ut supernè, notatæ. Tectrices inferiores albæ, nigro variegatæ. Rectrices quatuor externæ in medio utrinque latè albo-fasciatæ; ad apicem albo-marginatæ; quinta pogonio externo albo-fasciata; duæ mediæ totæ nigræ. Rostrum pedesque nigri. Longitudo corporis,  $6\frac{4}{3}$ ; alæ a carpo ad remigem quartam,  $3\frac{4}{3}$ ; caudæ,  $2\frac{1}{2}\frac{0}{0}$ ; rostri ad frontem,  $\frac{1}{2}$ , ad rictum,  $\frac{3}{4}$ ; tarsi, 1.
- Firi in Ornithologiâ præstantis, nobis amicissimi, GULIELMI JARDINE, Baroneti, Societatum Regiæ Edinensis et Linncanæ Socii, hæc species nomine distinguatur. Motacilla

Motacilla solitaria. Lewin, Birds of New Holland, pl. 16. Muscicapa solitaria. Lath. Gen. Hist. vi. p. 220. no. 110.

The specimens of this bird in the Society's collection are in very bad condition : but from their general characters, and the accounts we have received of their manners, we consider them as sufficiently according with M. Bechstein's group of Saxicola. Mr. Caley in his Notes thus observes of these birds.—"Cataract Bird : an inhabitant of rocky ground.—While at the Waterfall of Carrung-gurring, about thirty miles to the southward of Prospect Hill, I saw several of them. I have also seen them in the North Rocks, about a couple of miles from Paramatta : and always upon the rocks. I never observed them in trees or bushes." A specimen in the collection presented by Mr. Brown is marked as found by that gentleman at Port Jackson, September 15th, 1803.

We have some doubt as to this species according exactly with Mr. Lewin's *Motacilla solitaria*, and have therefore added a more detailed description of it than is our custom when noticing a published species.

# Fam. PIPRIDÆ. Genus. PARDALOTUS\*. Vieill.

# 1. PUNCTATUS. Pard. suprà griseus, fusco undulatus, capite alisque nigris albo punctatis, strigâ superciliosâ albâ, uropygio coccineo; subtus albidus, gutture flavo.

\* We characterize the following species, although not in the Society's collection, in order to point out the difference between it and *Pard. punctatus*, which it much resembles in general appearance.

 STRIATUS. Pard. dorso grisescenti-brunneo uropygio fulvo; capite alis caudâque nigris, illo albo-striato; strigâ superciliari ad frontem flavâ ponè albâ, pteromatibus apice coccineis, gulâ flavâ, pectore abdomineque albis, flavo parcè variegatis.
 Pipra striata. Lath. Ind. Orn. p. 558. no. 13.

Fæm.

Fœm. Capitis punctis fulvis.

Pipra punctata. Lath. Ind. Orn. Supp. p. lvi no. 1.

Pardalote pointillé. Temm. Pl. Col. 78. Vieill. Gal. des Ois. pl. 73.

We are informed by Mr. Caley, that "this species is called *Diamond Bird* by the settlers, from the spots on its body. By them it is reckoned a valuable bird on account of its skin. It is not very plentifully to be met with. It inhabits both forest-land and brushes; at least I have seen it in both."

#### Genus. PACHYCEPHALA\*. Swains. MSS.

- Rostrum forte, basi aliquantulum latum, culmine rotundato, arcuato; mandibulà superiore emarginatà; naribus basalibus, ovalibus, membranà suprà partim tectis, plumulis setisque parcè opertis; rictu setis debilibus parcè hirsuto.
- Alæ mediocres rotundatæ; remige primå brevi, secundå et tertiå gradatim longioribus, quartå et quintå ferè æqualibus longissimis, sextå paulò breviori, cæteris gradatim decrescentibus; tertiæ quartæ et quintæ pogoniis externis in medio paulò latioribus.

Cauda mediocris, ferè æqualis, vix furcata.

Pedes mediocres, subfortes; acrotarsiis scutellatis, paratarsiis integris.

Caput tumidiusculum.

Although we have received no account of the habits of the birds of this group, we consider the present family of *Pipridæ* to be that to which it bears the greatest affinity. The bill is formed very much on the same model as that of the Linnean *Pipra*, short, strong, rather wide at the base, and with an arched and rounded *culmen*. In their general appearance some of the

\* Παχυς crassus, and κεφαλη caput.

species

species exhibit a resemblance to the birds of the genus *Procnias*, Ill., while by the puffed-out appearance of the feathers about the head, we trace also an approximation to some of the Linnean *Pari*. An approach in character may also be noticed between them and the *Muscicapa*; among which, indeed, the typical species of the present group has been hitherto placed. The situations which we at present assign the group, in consonance with the views exhibited on the subject in a preceding volume of these Transactions<sup>\*</sup>, will be found to embrace all these affinities, and to unite all the birds thus approaching each other in one conterminous assemblage.

1. GUTTURALIS. Pac. flavo-olivacea; capite lunulâque pectorali nigris; jugulo albo; torque nuchali, pectore abdomine crissoque flavis.

Turdus gutturalis. Lath. Ind. Orn. Supp. p. xli. no. 6. Black-crowned Thrush. Lewin, Birds of New Holl. pl. 10.

"This species," Mr. Caley says, "is called *Thunder-bird* by the colonists. I have not often met with it, at least in perfect plumage. It frequents the green wattle-trees in Paramatta. The natives tell me, that, when it begins to thunder, this bird is very noisy."

2. PECTORALIS. Pac. grisea, strigå latå per oculos lunulâque pectorali nigris, jugulo albo; abdomine ferrugineo, pteromatibus remigibus rectricibusque fusco-nigris.

Capitis plumæ in medio longitudinaliter fusco-striatæ; dorsi, ptilorumque plumæ similiter at magis leviter striatæ. Pteromata, remiges, rectricesque fusco-nigræ, externè griseomarginatæ; subtus pallidiores, basi albescentes. Tectrices

\* Vol. xiv. p. 444.

inferiores

inferiores pallidè ferrugineæ. Rostrum nigrum. Pedes fusci. Longitudo corporis,  $6\frac{4}{5}$ ; alæ a carpo ad remigem quartam,  $3\frac{17}{20}$ ; caudæ,  $3\frac{7}{20}$ ; rostri ad frontem,  $\frac{1}{2}$ , ad rictum,  $\frac{3}{4}$ ; tarsi,  $\frac{9}{20}$ .

Muscicapa pectoralis. Lath. Ind. Orn. Supp. p. li. no. 11. Orange-breasted Thrush. Lewin, Birds of New Holl. pl. 6.

Some confusion has existed between these two last species, which we are decidedly of opinion are distinct, although referred to one species by Dr. Latham in his lately published *General History*. The former is a common and well known species. Of the latter, we have entered into the characters in detail, as it is less usually met with than *P. gutturalis*.

- 3. STRIATA. Pac. supernè olivaceo-grisea, leviter fusco-striata, subtus albescens, striis fuscis latioribus notata, pteromatibus remigibus rectricibusque fuscis.
- Fœm. Supernè grisea, subtus fulvo-albescens, graciliter fuscostriata; gulâ guttureque albidis.
- Capitis dorsique plumæ in medio strigis fuscis leviter notatæ. Guttur albescens. Remiges rectricesque suprà fuscæ, subtus pallidiores. Tectrices inferiores fulvo-albidæ, leviter fusco-striatæ. Rostrum pedesque pallescentes. Longitudo corporis,  $6\frac{3}{10}$ ; alæ a carpo ad remigem quartam,  $3\frac{7}{10}$ ; caudæ, 3; rostri ad frontem,  $\frac{9}{20}$ , ad rictum,  $\frac{7}{20}$ ; tarsi,  $\frac{4}{5}$ .

The inside of the mouth of these birds is noted by Mr. Caley as being yellow; the eyes are black; their weight is an ounce.

4. FUSCA. Pac. olivaceo-fusca, subtus pallidior, gulà abdomineque albidis, remigibus rectricibusque fuscis, istarum intimarum marginibus ferrugineis.

#### Pteromatum

Pteromatum interiorum apices fulvo, exteriorum fusco, notati. Tectrices inferiores albescentes. Rostrum flavescens. Pedes fusci. Longitudo corporis, 6; alæ a carpo ad remigem quartam,  $3\frac{1}{20}$ ; caudæ,  $3\frac{1}{10}$ ; rostri ad frontem,  $\frac{4}{10}$ , ad rictum,  $\frac{13}{20}$ ; tarsi,  $\frac{13}{20}$ .

There are two specimens of this bird in the collection, one of which is marked by Mr. Caley as a young male, the other as a female. It is probable that the adult male may differ from both. The eyes are noted as being black. Their weight is 14 drachms.

- 5. OLIVACEA. Pac. suprà viridi-olivacea, subtus fulvescens, capite grisescente, gutture albo notato.
- Remiges rectricesque fuscæ, viridi-olivaceo externè marginatæ; hæ subtus viridi-flavescentes, istæ pallidè fuscæ. Tectrices inferiores albidæ. Rostrum fuscum, mandibulâ inferiore ad basin fuscâ. Pedes nigri. Longitudo corporis,  $7\frac{7}{10}$ ; alæ a carpo ad remigem quartam,  $3\frac{4}{5}$ ; caudæ,  $3\frac{7}{10}$ ; rostri ad frontem,  $\frac{1}{2}$ , ad rictum,  $\frac{7}{10}$ ; tarsi,  $1\frac{1}{10}$ .
- 6. FULIGINOSA. Pac. griseo-testacea, subtus pallidior subfulvescens, gulà albidescente.

Rostrum nigrum. Pedes fusci. Longitudo corporis, 6 : alæ a carpo ad remigem quartam,  $3\frac{7}{10}$ ; rostri,  $\frac{13}{50}$ ; tarsi,  $\frac{19}{50}$ .

Two birds of this species were presented to the Society by Mr. Brown, which he met with on the South coast of New Holland. A third bird, presented also by that gentleman, was found by him on the East coast. It varies from the other two in the upper colour being more plumbeous. This may be a distinct species; but all the specimens are in bad condition, and it is impossible to make any decision respecting them, particularly in a group where the colours are in general indistinct. VOL. XV. 2 I 7. Aus-

7. AUSTRALIS. Pac. suprà cinerea, dorso infimo flavescente; subtus flava, remigibus rectricibusque fuscis.

Muscicapa australis. Lath. Ind. Orn. Supp. p. l. no. 2. Southern Motacilla. White's Voy. pl. in p. 239. Southern Flycatcher. Lath. Gen. Hist. vi. p. 216. no. 102.

"This bird," Mr. Caley says, "is called *yellow Robin* by the colonists. It is an inhabitant of brushes." A bird in the collection, which has in every respect the appearance of the present species, with the exception of the throat being whitish instead of yellow, was met with by Mr. Brown on the South coast. It is probably the young of the species.

The two last species deviate considerably in the form of their bills from the other species of this genus. Those members are much more slender and less arched at the *culmen* than in the typical birds. In other characters the two species sufficiently accord with the group. We leave them at the extremity of it for the present, not being willing to speak too decisively on a subject in which our materials are scanty and not in the best order for examination. The two species evince a very strong approximation to the *Muscicapida*.

#### Fam. MUSCICAPIDE.

#### Genus. MUSCICAPA. Linn. et Auct.

If we select the Muscicapa atricapilla of Linnæus as the type of the extensive family of Muscicapidæ, and the representative of the true Muscicapa,—an arrangement, which from our familiarity with the species, and from its exhibiting characters the most remote from those of all the neighbouring groups, appears to be the most expedient,—little deviation will be found to exist between some of the Australian species of the family and the European type. The three following species belonging to the Society's

Society's collection accord very closely with the general characters of that type. The construction of the bill is nearly the same; in our birds that member being only in a slight degree longer and more gracile. The wing has the same formation; the first quill-feather being short, and the second and third gradually exceeding it; the only difference discernible in this member is, that in the European bird the fourth feather is the longest, while in ours the fifth rather exceeds the fourth. The legs and feet afford no mark of distinction ; unless, perhaps, we should say that in our birds the tarsi are somewhat longer. These slight differences do not exhibit sufficient ground for separation between the birds of these distant countries; particularly as there is a striking resemblance in the disposition of their colours. We may, for instance, trace the white front, and the white markings on the wings and tail of M. atricapilla in the Australian species. There are several species described by authors as belonging to New Holland, the description of whose colours approaches very nearly to that of the birds before us. We have not seen these birds, but consider it probable that they belong to the same group.

1. MULTICOLOR. Musc. nigra; fronte, maculà tectricum, fascià remigum, rectricum lateralium strigâ, crissoque albis; pectore abdomineque coccineis.

Muscicapa multicolor. Gmel. i. p. 944. no. 74. Muscicapa erythrogastra. Lath. Ind. Orn. p. 479. no. 50. Red-bellied Flycatcher. Id. Gen. Hist. vi. p. 209. no. 88. pl. 100.

We have referred this bird to the *red-bellied Flycatcher* of Dr. Latham, although that species does not possess the white markings on the wing-coverts or the tail which are seen in our bird, as far at least as we can judge both from the figure and description given by that gentleman. Such differences in the white

markings,

markings, we must observe, are important; similar differences form the points of distinction between our European species, M. collaris, Bechst., and M. atricapilla, Linn. But at present we have not sufficient grounds for decision on this subject; the few specimens we have in this country exhibiting much appearance of variation. We therefore merely express our doubts.

We have necessarily adopted Gmelin's name for this species instead of Dr. Latham's, in as much as the former has the right of priority. Dr. Latham, although he described and figured the bird in 1783, did not give it a scientific name until he published his "Index Ornithologicus" in 1790, two years after the publication of Gmelin's "Systema." A line of distinction must be drawn by which we can invariably determine the choice of names, where a species or a group has more than one; and the date of publication seems to be the justest and most uniform by which we can be regulated. In the present instance, however, and in many others of a similar description, we have to regret, that whatever credit is due to him who confers a title on a group in nature,-and, trivial as it is, still some little reputation is attached to such points,---is transferred to the compiler, who puts together without knowledge or discrimination the observations of those who precede him, and thus stamps with his own name the labours of others, in detriment to the true naturalist, who works not from books, but studies in nature. The law, however, ought to be inflexible; and as such it would be expedient for naturalists not to exhibit the fruit of their labours without at the same time characterizing and naming them.

In Mr. Caley's MSS. are the following observations on the specimens in our collection. "Australasian Redstart.—'This is by no means to be called a plentiful bird, and it seems to be scattered over a great space of country. In the month of November I saw

I saw it when far distant in the mountains, the roughest part of the country I had then or since visited. In the months of March and April, when I was in Western Port, it came and perched on the rigging of the vessel.—I apprehend it is migratory; but if this is the case, it does not depart to any great distance."

- 2. LATHAMI. Musc. nigra, pectore abdomineque purpureo-roseis, maculà frontali crissoque albis.
- Var. B? rectricibus tribus extimis internè albo-marginatis.
- Frontis macula subrotunda, alba. Remiges rectricesque fusconigræ, subtus pallidiores. Tectrices inferiores nigræ. Rostrum nigrum. Pedes fusci. Longitudo corporis,  $4\frac{1}{4}$ ; alæ a carpo ad remigem quintam,  $2\frac{1}{20}$ ; caudæ,  $2\frac{3}{10}$ ; rostri ad frontem,  $\frac{2}{5}$ , ad rictum,  $\frac{1}{2}$ ; tarsi,  $\frac{7}{10}$ .

Muscicapa Lathami. V. in Zool. Journ. vol. i. p. 410. pl. 13.

For the same considerations that influenced us when we referred the last bird to a described species of Dr. Latham, although it evinced some marks of difference from the figure of that species, we are inclined to consider the bird before us as a variety of the *Muscicapa Lathami* of the *Zoological Journal*. It differs from the specimen there described in having the three outer tail-feathers margined internally with white. The specimen in the Society's collection was met with at Port Jackson by Mr. Brown, August 1803.

- 3. GOODENOVII. Musc. nigra; abdomine, strigå longitudinali alarum, rectricumque duarum lateralium marginibus albis; fronte, pectoreque vividè coccincis.
- Frontis sincipitis partis pectorisque plumæ basi albæ, apice coccineæ. Striga lata alba longitudinaliter extendit per tectrices remigesque secundarias. Remiges quarta et quinta leviter in medio externè albo-marginatæ : cæteræ utrinque fasciâ

fasciâ albâ in medio notatæ; subtus pallidè fuscæ, pogoniis, ut supernè, albo-notatis. Tectrices inferiores albæ. Abdominis latera parcè coccineo imbuta. Rectrices; prima alba, strigâ longâ basali internâ, brevique subapicali externâ fuscis notata; secunda fusca, strigâ in medio pogonii externi, margineque apicali albis notata: cæteræ fusconigræ, subtus pallidiores. Pedes fusci. Longitudo corporis,  $3\frac{4}{5}$ ; alæ a carpo ad remigem quartam,  $2\frac{9}{20}$ ; caudæ,  $2\frac{1}{10}$ ; rostri ad rictum, circiter,  $\frac{1}{2}$ ; tarsi,  $\frac{7}{10}$ .

In honorem Viri reverendissimi eruditissimique, SAMUELIS GOOD-ENOUGH, Carliolensis Episcopi, Societatis Linneanæ Pro-PRÆSIDIS, in Historiæ Naturalis Scientiâ præstantis, hanc avem eximiam nominavimus.

This beautiful species was discovered by Mr. Brown on the South coast of New Holland in 1802.

## Genus. RHIPIDURA\*.

- Rostrum breve, depressum, basi latum, apice compressum, culmine arcuato; mandibulâ superiore apice emarginatâ; naribus basalibus, ovalibus, setis plumulisque ferè obtectis; rictu vibrissis confertis mandibulas longitudine ferè superantibus instructo.
- Alæ mediocres, subacuminatæ; remige primå brevissimå, secundå duplò longiore, tertiå et quartå, quæ est longissima, gradatim longioribus.

Cauda elongata, patula, apice rotundata.

Pedes mediocres, graciles, acrotarsiis paratarsiisque integris.

This group may be at once recognised as offering strong marks of distinction from the true *Muscicapa* in the fan-like structure of the tail. In the birds which feed entirely or par-

\* 'PITIS flabellum, and oupa cauda.

tially

tially in the air this member becomes of much importance, as contributing more or less to their support or government in their In the true Muscicapa its general character aërial movements. is that of being slightly forked: in the present group it is rounded at the apex; but what it loses in that forked structure. which is generally supposed to be most conducive to the purposes of flight, it gains in being lengthened and capable of being spread out like a fan, so as to give the bird a greater power in the air. The group is also distinguished by the great length and number of the rictal bristles, which exceed the bill itself in length. This also is an important character among the birds that feed on insects in the air, as serving to encompass and secure their prey: and the greater or less development of the character becomes a material point of distinction among them. The wings, although very similar in structure to those of Muscicapa, are less rounded, and, being in a slight degree acuminated, possess perhaps somewhat superior powers of flight. We have not hitherto noticed any birds possessing the characters of the group, except the New Holland species.

1. FLABELLIFERA. Rhip. fusco-nigra; maculà superciliari postocularique, gulà, tectricum apicibus, rectricumque rhachibus et apicibus albidis; abdomine ferruginescente.

Muscicapa flabellifera. Gmel. i. 943. no. 67. Fan-tailed Flycatcher. Lath. Gen. Hist. vi. p. 184. no. 44. pl. 99.

The figure that Dr. Latham gives of this species has much more white on the lateral tail-feathers than our bird. But that gentleman affirms that the species is subject to much variation. Mr. Caley thus observes on the manners of this bird. "Fantail.—There is something singular in the habits of this bird. It frequents the small trees and bushes, from whence it suddenly darts at its prey, spreading out its tail like a fan, and to appearance

ance turning over like a *tumbler Pigeon*, and then immediately returning to the same twig or bough from whence it sprang. These actions it continues constantly to repeat. The skin is very tender; and it is difficult after having taken it off the body to restore it again to its proper shape. The species is very common about Paramatta; and I do not recollect having missed it at any period of the year."

- 2. MOTACILLOIDES. Rhip. nigra; maculá superciliari, pectore medio, abdomine, crissoque albis; remigibus nigro-fuscis.
- Gulæ latera parcè albo variegata. Dorsi color niger in pectus descendit, fasciam interruptam pectoralem exhibens, pectorisque colorem album, ut in circulo, ferè circumcingens. Pteromata ad apicem parcè albo-marginata. Tectrices inferiores nigro alboque variæ. Remiges fuscæ, subtus pallidiores. Rostrum pedesque nigri. Longitudo corporis,  $7\frac{1}{5}$ ; alæ a carpo ad remigem quartam,  $3\frac{1}{5}$ ; caudæ,  $4\frac{1}{2}$ ; rostri ad frontem,  $\frac{3}{5}$ , ad rictum,  $\frac{3}{5}$ ; tarsi,  $\frac{9}{10}$ .

This species was discovered by Mr. Brown at George's River in September 1803. It bears a great resemblance to the description of Dr. Latham's *Motacilla atricapilla*\*, or the *Black-topped Flycatcher* of his "*General History*+", but differs in the colour of the bill, back and throat. The latter species most probably belongs to the present group.

3. RUFIFRONS. Rhip. fusco-brunnea, fronte, superciliis, dorso infimo, caudæ basi, abdomineque infimo rufis; jugulo nigro, gulâ pectoreque albis, hoc nigro-maculato; remigibus rectricibusque fuscis, his apice albido.

Muscicapa rufifrons. Lath. Ind. Orn. Supp. p. 1. no. 5. Rufous-fronted Flycatcher. Id. Gen. Hist. vi. p. 213. no. 95.

\* Ind. Orn. Supp. p. liii. no. 1. + Vol. vi. p. 214. no. 96.

Mr.

Mr. Caley appends the following remarks to this species. "This bird appears to me to be a rare one, at least I do not recollect having ever seen any other specimen than the present. I met with it on the 15th of October 1807 at Cardunny, a place about ten miles to the north-east of Paramatta. It is a thick brush (or underwood), and is the resort of the great Bat."

#### Genus. Seïsura\*.

Rostrum elongatum, subforte, valdè depressum, basi medioque latum, mandibulà superiore ad apicem subarcuatà, subemarginatà; naribus basalibus, ovalibus, setis plumulisque obsitis; rictu setis brevibus parcè instructo.

Lingua<sup>+</sup> ad apicem et ad latera laciniata.

Alæ subelongatæ, ad medium caudæ extendentes ; remige primâ brevi, secundâ et tertiâ gradatim longioribus, quartâ quintâ et sextâ æqualibus longissimis, tertiâ et septimâ his paulò brevioribus; tertiæ quartæ et quintæ pogoniis externis in medio paulatim latioribus.

Cauda elongata, patula, apice ferè æqualis.

Pedes mediocres, acrotarsiis scutellatis, paratarsiis integris.

This group bears a very close resemblance to the latter in the form of its tail, and we consequently expect to find in it a similarity of habits. In this expectation we shall not be disappointed, as the concurrent testimony of all the eye-witnesses of the manners of the bird which forms the type of the genus represents it as being an active and restless bird, moving its tail when in quest of insects like the European *Motacilla*, and spreading it out like the preceding group of *Rhipidura* when it

\* Seiw quatio, and over cauda.

+ The tongue of the type of this genus, of which a specimen was fortunately attached to one of the birds in the Society's collection, differs from that of the European *Musc. grisola* only in being longer, the length being in proportion to that of the bill.

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darts upon its prey. It is, however, sufficiently distinguished from *Rhipidura* by the tail being even, not rounded, at the end. The bill also is much more lengthened, more depressed, and stronger; and it is deficient in those elongated bristles which protect the *rictus* of the preceding birds. The formation of the wing also of both these genera will be observed, from the characters given of each, to be materially different: and the marked scutellation of the *tarsi* separates the present group from the preceding, and indeed from most of the *Muscicapidæ* that we have as yet had an opportunity of examining.

1. VOLITANS. Seïs. suprà nigra, subtus alba; capite metallicè atro, remigibus fuscis.

Turdus volitans. Lath. Ind. Orn. Supp. p. xli. no. 10. Volatile Thrush. Id. Gen. Hist. v. p. 122. no. 151.

We find the following observations on this species in Mr. Caley's MSS. "This bird is called by the colonists *Dishwasher*. It is very curious in its actions. In alighting on a stump of a tree it makes several semicircular motions, spreading out its tail at the time, and making a loud noise, somewhat like that caused by a rasor-grinder when at work. I have seen it frequently alight on the ridge of my house, and perform the same evolutions. I have often considered it, when I witnessed these manners, to be the *Wagtail* of the colony.—The stumps of trees on which it alights are those which have been left standing, where the ground has been cleared; the trees themselves having been cut down about a yard from the ground."

## Genus. Муійска\*.

Rostrum rectum, subbreve, depressum, basi latum, multò latius quàm altum; mandibulà superiore emarginatà; naribus ba-

\* Muia musca, and aygeve venor.

salibus,

salibus, ovalibus, setis plumulisque ferè obtectis; rictu vibrissis fortibus hirsuto.

- Alæ mediocres subrotundatæ; remige primâ brevi, secundâ duplò ferè longiore, tertiâ quartâ et quintâ ferè æqualibus longissimis.
- Cauda mediocris, lata, æqualis aut interdum subfurcata.
- Pedes graciles, mediocres; acrotarsiis scutellatis, scutorum suturis vix decernendis.

The necessity of subdividing the overgrown Linnean genus of *Muscicapa* has long been acknowledged: and the difficulty of seizing upon such characters as will serve to distinguish such subdivisions has been equally admitted. Where so much similarity prevails as in the characters belonging to all the species of the truly natural group of *Muscicapida*, it is only by observing the different modifications of the same characters,—by fixing, in fact, upon the greater or less developement of them, and not by detecting any tangible differences among them,—that we can hope to draw such boundary lines between the groups of the family as will restrain the number of species contained in each within moderate limits.

Hitherto the only material subdivisions that have been instituted in this family consist of the genera *Platyrhynchus*, Desm., and *Muscipeta*, Cuv. The former of these groups includes those birds in which the broad and flattened bill, peculiar to the Linnean *Muscicapa*, is carried to the extreme bounds of its developement. The breadth, which is nearly equal to that of the head, extends nearly the whole length of the bill, which becomes narrower only towards the *apex*. Such a character affords a good foundation for a group. The genus *Muscipeta* does not appear to be equally well defined. As it has been latterly extended by those ornithologists who have adopted the name of  $2 \times 2$  M. Cuvier's

M. Cuvier's genus, it seems calculated to embrace all the species of the family which do not belong to the European form; in fact, merely to draw a geographical line of demarcation between the European and extra-European species. 'To those who have had an opportunity of observing the mode in which the characters of the *Muscicapidæ* vary in the numberless foreign species which we already possess, and which are daily increasing our collections, it must be evident that such a wide latitude includes in the genus *Muscipeta* a vast variety of forms: while at the same time it affords but little relief to the student in lessening the number of species detached from the original *Muscicapa*.

It appears to us, however, that some advance will be made to the more luminous arrangement of this family, by restricting the species of Muscipeta to those which exhibit the characters originally laid down by M. Cuvier for the group, and which accord with the birds enumerated by him as its types. From these we may perhaps select the Muscicapa Paradisi of Linnæus as the most conspicuous. and best fitted to point out the characters which that eminent naturalist designed to particularize. We here perceive a somewhat elongated bill, which appears intermediate with respect to its breadth between the narrower bills of the European Muscicapæ, and the widely-dilated bill of Platurhynchus. The tail also is graduated. The group, thus restricted, will contain a number of well-defined species, which at present appear to us proper to Africa and India, and which more or less accord with this type. In addition to this group, we have ourselves already pointed out two other forms among our New Holland species, which, besides the modifications of their bills, exhibit by the structure of the tail, and the use to which it is applied, some natural grounds for separation. We venture in addition to propose another group, characterized above, which we have reason to hope will still further serve to afford

afford some assistance towards the subdivision of the family. In it the bill, like that of the group to which we would restrict the name of Muscipeta, is intermediate in breadth between the bills of the true Muscicapa and Platyrhynchus. It is at the same time moderately short; in which it differs from the bill of Muscipeta. The tail is even, by which character it may be also distinguished from the latter genus; and moderate in length, by which it is separated from the equally even but long-tailed Seïsura. In drawing a line between the species of this family we are inclined to lay much stress upon the structure of the tail. Nearly allied as the whole group is to the Fissirostral Birds which feed upon the wing, and being themselves accustomed to seize their prey in the air, a member which, like the tail, contributes to their powers of flight, or support upon the wing, must be considered as of much importance: and in a numerous family like that before us, which calls for subdivision, and in which no stronger mark of distinction is tangible, it appears to us that the variations in the structure of the tail afford not merely a convenient artificial ground of separation, but one which is sufficiently natural. The group, as we have at present characterized it, does not appear to be peculiar to New Holland. Some American species, such as the Muscicapa querula and M. rapax of Wilson's "Ornithology," appear to belong to it.

- 1. RUBECOLOIDES. My. plumbeo-grisea, gutture pectoreque rufis, abdomine albido, pteromatibus remigibus rectricibusque fuscis.
- Pteromatu remigesque interiores pallido-fusco-marginatæ. Tectrices inferiores albidæ, fusco-variegatæ. Remiges rectricesque subtus grisescentes. Rostrum nigrum. Pedes fusci. Longitudo corporis, 5½; alæ a carpo ad remigem quartam, 3; caudæ, 2¾; rostri ad frontem, ⅔, ad rictum, 710; tarsi, 710.

2. PLUMBEA.

- 2. PLUMBEA. My. suprà fusco-plumbea, capite cervice guttureque nitidè cæruleo-plumbeis; abdomine crissoque albis.
- Remiges subtus fuscæ, ad basin internè albescentes. Tectrices inferiores albæ, prope carpum fusco-maculatæ. Rectrices subtus pallidè fuscæ. Rostrum pedesque nigri. Longitudo corporis,  $4\frac{1}{2}$ ; alæ a carpo ad remigem quartam, 3; caudæ,  $2\frac{3}{4}$ ; rostri ad frontem,  $\frac{9}{20}$ , ad rictum,  $\frac{7}{10}$ ; tarsi,  $\frac{7}{10}$ .
- 3. MACROPTERA. My. suprà olivescenti-fusca, subtus albescens, remigibus rectricibusque fuscis, harum exterioribus gulà crissoque albis.
- Remiges subtus pallidiores, basin versús internè albescentes. Ptila inferiora albida, fusco parcè notata : pteromata alba. Rectrices, prima tota alba, secunda ad basin fusca, tertia ad apicem alba, cæteræ fuscæ, subtus pallidiores. Rostrum pedesque nigri. Longitudo corporis,  $5\frac{1}{10}$ ; alæ a carpo ad remigem quartam,  $3\frac{17}{20}$ ; caudæ,  $2\frac{1}{5}$ ; rostri ad frontem,  $\frac{2}{5}$ , ad rictum,  $\frac{13}{20}$ ; tarsi,  $\frac{13}{20}$ .

The comparative length of the wings in this species and the shortness of the tail distinguish it from the other species of this group. The wings reach to the extremity of the latter member. In other characters it accords sufficiently with the group. Mr. Caley informs us that the boys of the colony used to call it *Winter*, the reason of which he does not give. He adds, that "the bird has all the actions of the British *Robin Redbreast*, except coming inside houses. When a piece of ground was fresh dug, it was always a constant attendant."

#### Genus. MONARCHA.

Rostrum forte, subelongatum, basi latum, subdepressum ; culmine carinato, apice arcuato ; mandibulâ superiore emarginatâ ; naribus

naribus basalibus, rotundis, setis plumulisque opertis; rictu vibrissis fortibus instructo.

Alæ mediocres, subrotundatæ; remige primå brevi, secundå duplò longiore, tertiå et quintå æqualibus, quartå quæ est longissima, paulò breviori; cæteris gradatim breviscentibus: tertiæ ad sextam inclusam pogoniis externis paulatim in medio latioribus.

Cauda mediocris, æqualis. Pedes mediocres, acrotarsiis scutellatis, paratarsiis integris.

The powerful construction of the bill of this group separates it at once from the other species of the Muscicapida, with which in the depression and breadth at the base of that member, the strength of the rictal bristles, and the general characters of the wings and legs, it otherwise accords. This strength of bill would incline us to place the bird among the Laniada, and in the subfamily of Tyrannina, Swains., of which it might thus be considered to form the Australian representative, did not the other characters of its structure evince a more predominant inclination to the Muscicapidæ than to the Tyranni. The group may, however, be considered to stand intermediately between the two families; and might perhaps be referred with equal propriety to either, according to the characters, which each naturalist would select as most predominant, and most convenient to guide him in his subdivisions. The habits of the birds of the group, hitherto unknown, will have much influence in determining its exact station.

 CARINATA. Mon. plumbea; genis collique lateribus pallidioribus; fronte, gulà, notâque carpali nigris; abdomine. tectricibús inferioribus, crissoque ferrugineis.
 Muscipeta carinata. Swains. Zool. Illust. pl. 147.

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The specimen of this species in our collection was procured by Mr. Brown at the Bay of Inlets near the inner entrance of Thirsty Sound, September 1802.

Tribus. CONIROSTRES. Cuv.

Fam. FRINGILLIDÆ.

Genus. FRINGILLA. Auct.

There is no group which requires more revision than the extensive family of *Fringillidæ*. Although M. Cuvier in his "*Règne Animal*" has pointed out some well-defined divisions of the family, yet there still remains such a number of species belonging not merely to the Linnean *Fringilla*, but which have indiscriminately and apparently without any decided law of demarcation been scattered by the strict followers of Linnæus in his genus *Loxia*, that many more subdivisions must yet be effected before the whole group can be placed in an intelligible and luminous order. The few species that occur in the New Holland collection do not afford us materials or opportunity for throwing any light at present upon the subject. They are chiefly well-known species; and we shall introduce them without any attempt at more accurate arrangement, under the comprehensive genus *Fringilla*.

1. LATHAMI. F. grisescenti-brunnea; loris, fascià latà pectorali, lateribusque abdominis nigris; horum maculis rotundis, gutture, abdomine, crissoque albis; uropygio coccineo.

Fringilla leucocephala, var. Lath. Ind. Orn. Supp. p. xlviii. no. 1.

Spotted-sided Grosbeak. Id. Gen. Hist. v. p. 248. no. 50. pl. 89.

It is only in a very urgent case, and where a decided inapplicability of name occurs, that we would venture to change the original

original name of any species. The present case seems to be one where we are called upon to risk such an alteration. Out of numberless birds of this species which have come under our observation, we have seen none in which the colour of the head was not the same as that of the bird before us, a gravish-brown. The white-headed specimen which Dr. Latham figured, and from which he derived the name of leucocephala, appears to be not a typical individual of the species, but an accidental, or, as far as is hitherto known, an unique variety of it. Even still we should adhere to an established name, however strictly inapplicable to an entire group, if the original describer had named the species from an actual specimen. But in the present instance we find that Dr. Latham's figure and description are taken from a drawing. We shall not, however, deprive this beautiful bird of its original name without assigning it a better. And in proposing the present alteration, we hope the venerable Father of Ornithology will pardon us for the liberty we have taken, and accept this slight tribute of gratitude for the valuable assistance which his labours have afforded us in our ornithological studies.

Mr. Caley calls this species *Red Diamond Bird*,—the colonial name; he met with it occasionally, but not in abundance. He is not aware of its habits.

2. BELLA. F. brunnescenti-grisea, fasciis numerosis nigris lineata; subtus alba, nigro-fasciata; loris nigris; uropygio rectricumque mediarum basi coccineis.

Loxia bella. Lath. Ind. Orn. Supp. xlvi. no. 8. Black-lined Grosbeak. Id. Gen. Hist. v. p. 267. no. 83.

Some specimens of this species in the collection were brought by Mr. Brown from Port Jackson, where he obtained them September 1803.

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- 3. BICHENOVII. F. murino-brunnea, graciliter fusco-fasciata; pteromatibus remigibusque albo-tessellatis; genis, gutture, abdomine, uropygioque albis; loris, fasciá gracili gutturali alterâque abdominali, dorso imo, crisso, rectricibusque nigris.
- Capitis vertex saturatiori-brunneus, fasciis fuscis vix decernendis : ptila pallidiora fasciis numerosis conspicuis. Remiges primariæ, externarum pogoniis extimis ad medium usque et gradatim paulò ultrà, internarum ad apicem, albomaculatis; secundariæ, exteriores pogoniis extimis, interiores utrinque, maculis albis in paribus dispositis notatæ: subtus, primariæ fuscæ, secundariæ, ut supernè, maculis conspicuis instructæ. Pteromata maculis albis, ut in remigibus secundariis, notatæ. Tectrices inferiores albæ, ad car-Fascia gracilis nigra gutturalis a capipum nigro notatæ. tis lateribus utrinque extendit, genas gulamque circumcingens. Fascia abdominalis ab humeris utrinque extendit, pectus ab abdomine dividens. Rectrices suprà et infrà nigræ. Rostrum, mandibulå superiore ad basin plumbeo-nigrâ, apice albido, inferiore ad basin plumbeo-nigrâ, apice tomiisque albidis. Pedes plumbeo-fusci. Longitudo corporis,  $3_{\frac{5}{5}}$ ; alæ a carpo ad remigem secundam,  $2_{\frac{1}{10}}$ ; caudæ,  $1\frac{3}{4}$ ; rostri,  $\frac{7}{20}$ ; tarsi,  $\frac{1}{20}$ .
- In honorem viri nobis amicissimi JACOBI E. BICHENO, Armigeri, Linneanæ Societatis SECRETARII, Zoologiæ studiosissimi, hæc species perpulchra nominatur.

This delicately-coloured species was discovered by Mr. Brown at Shoalwater Bay and Broad Sound, September 1802.

4. TEMPORALIS. F. olivaceo-brunnea subtus albescens, capite cærulescenti-griseo, tæniå per oculos uropygioque coccineis. Fringilla

Fringilla temporalis. Lath. Ind. Orn. Supp. xlviii. no. 4.
Temporal Finch. Id. Gen. Hist. vi. p. 115. no. 91. Lewin, Birds of New Holl. pl. 12.

"This bird," says Mr. Caley, "which the settlers call *Red-bill*, is gregarious, and appears at times in very large flocks. I have killed above forty at a shot. They frequently visited my garden in the winter to feed on a species of grass-seed."

#### Fam. STURNIDÆ.

We have introduced the mention of this family for the purpose of stating the great deficiency, if not total want of the birds belonging to it, which prevails in New Holland. In the continents of the Old and New World the Sturnidæ congregate in large flocks, and follow the herds of the larger herbivorous Mammalia, from whom they obtain a great portion of their nourishment, collecting the insects with which they abound, and the remains of the herbaceous food which are found in their neighbourhood. The general want of these herbivorous Quadrupeds in Australia, accounts for a corresponding deficiency in those birds which look to them for a chief portion of their support. A similar deficiency in the Coprophagous insects has been equally observed\* in the same country, and a similar cause assigned for it. A species however of the family is now before us, which has been for some time included in our New Holland collection. It bears no note of whence it came, nor any donor's name; and we have some doubts whether it might not have crept into the collection by mistake. As we have been particularly guarded against introducing any species which has not come to the Society from an authentic source, we refrain from giving it as a New Holland bird, but shall merely

\* See "Hora Entomologica," part i. p. 59.

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characterize it\*, with a statement of our doubts. We have also to mention that a pair of the *Sturnus militaris*, Linn., a species also belonging to this family, have been presented to the Society by a gentleman who received them with other birds from New Holland. The species has hitherto been considered exclusively South American: and as the skins of our birds might easily have been imported from America into New Holland, we consider it extremely doubtful that they were natives of the latter country. The subject is one of importance, as involving not merely the fact of the wide dispersion of a species, but of the existence of a group in New Holland as yet unnoticed there ; and we therefore consider it prudent merely to state the above circumstances without any further comment.

#### Fam. CORVIDE.

Genus. CRACTICUS. Vieill. (Barita. Cuv.)

1. TIBICEN. Cr. niger, nuchá, tectricibus alarum, dorso imo, uropygio, crisso, caudæque basi albis.

Coracias tibicen. Lath. Ind. Orn. Supp. p. xxvii. no. 2. Piping Roller. Id. Gen. Hist. iii. p. 86. no. 23.

"The birds of this species," Mr. Caley informs us, "are gregarious, and found only in particular places. In the morning they make a loud whistling noise high up in the trees.—The natives call the species Ca'ruck: and they tell me it builds its nest of sticks lined with grass in *Iron-bark* and *Apple-trees* (a species of *Angophora*). It has three young ones.—These birds

\* Genus. LAMPROTORNIS. Temm.

MORIO. Lamp. corpore toto nigro, metallicè subnitente. Rostrum pedesque nigri. Longitudo corporis,  $9\frac{1}{4}$ ; alæ a carpo ad remigem secundam, 5; caudæ,  $3\frac{1}{20}$ ; rostri ad frontem,  $\frac{1}{20}$ , ad rictum,  $1\frac{3}{10}$ ; tarsi,  $1\frac{7}{10}$ .

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do not appear to be migratory. To the best of my recollection I have never missed them."

2. VARIUS. Cr. niger; torque nuchali, ptilis, pteromatum strigå longitudinali, dorso imo, uropygio, abdomine, crisso, rectricumque lateralium apicibus albis.

Coracias varia. Lath. Ind. Orn. p. 173. no. 22. Cassican de la Nouvelle Guinée. Pl. Enl. 628. Pied Roller. Lath. Gen. Hist. iii. p. 86. no. 24.

The specimen in the Society's collection was found by Mr. Brown at Keppel's Bay, in August 1802.

3. STREPERUS. Cr. niger ; maculà alarum, crisso, caudæque basi apiceque albis.

Coracias strepera. Lath. Ind. Orn. 173. no. 21. Corvus streperus. Leach, Zool. Misc. vol. ii. pl. 86. White-vented Crow. White's Journ. pl. in p. 251. Grand Calybé. Le Vaill. Ois. de Par. &c. pl. 24. Le Cassican reveilleur. Vieill. Gal. des Ois. pl. 109.

"This bird," says Mr. Caley, "is called by the colonists *Hircine Magpie*. It is very good eating, except the hinder parts, which have a strong goatish smell. It is gregarious. I have known large flocks of these birds come occasionally into the small trees (*Gum-wattle*) about Government House and elsewhere, and hop about from tree to tree until driven away by being fired at. They may also be seen in large flocks on the new-sown wheat, particularly in the depth of winter."

Genus. Corvus. Linu. et Auct.

1. CORONOIDES. Corv. totus niger subcærulescens, rostro subelongato.

Rostrum

Rostrum sublongum vix glabrum. Longitudo corporis, 22; alæ a carpo ad remigem tertiam, 14; caudæ, 9; rostri,  $2\frac{3}{10}$ ; tarsi,  $2\frac{3}{10}$ .

This bird has a very general resemblance to our common species C. corone. It is to be distinguished chiefly by its superior size, its length being twenty-two inches, while that of the European species is eighteen inches\*. The bill also differs. In our bird this member is much more elongated in proportion to its size; the *culmen* is less rounded and arched, and the *gonys* of the under mandible less prominent: it is also less smooth and glossy than in C. corone.

In Mr. Caley's MSS. are the following remarks. "This bird is gregarious and not to be met with at all times. Its native name is Wa'gan.—Moowattin, a native follower of mine, tells me that it makes its nest like the Ca'ruck (Cr. tibicen), but that he never met with more than one nest, which was in a Coray'bo tree, at the Devil's Back, about four miles from Prospect Hill. He and several other natives at first took it to be a Curriaygun's (Scythrops) nest. There were two young ones in it, and the broken shells of two eggs, which were quite black. There was a quantity of dung under the tree.—

"I have observed that the croak of this bird is not so hoarse as that of *C. corone*. This was also remarked by the same native when with me in this country (England) on his hearing a Crow one morning near Fulham.—The people in the colony say that it will devour chickens: this I rather doubt."—In a subsequent Note Mr. Caley says, that he remembers once or twice meeting with a single bird of this species; and once more particularly in the month of November 1804, when in the roughest part of the mountains, he observed for several days a pair of them flying

\* Montague, Ornith. Dict .- Art. " Crow-carrion."

about.

about. The people who accompanied him observed that they must be lost, or they would never remain in so dreary a country. —On the whole, however, he considered them as gregarious.

Genus: PTILONORHYNCHUS. Kuhl.

- 1. MACLEAVII. Lath. MSS. Ptil. metallicè ater; plumis nitentibus sericeis, rostri apice pedibusque flavescentibus.
- Fœm. suprà viridis, subtus pallidior, maculis albis lunulisque fuscis variegata : pteromatibus, remigibus, rectricibusque rufobrunneis.
- Mas. Pteromata atra apicibus metallicè nitentibus. Remiges rectricesque atræ sine nitore, subtus fuscescenti-atræ. Mandibulæ ad basin nigræ, marginibus apicibusque flavescentibus. Longitudo corporis,  $12\frac{9}{10}$ ; alæ a carpo ad remigem quartam,  $6\frac{3}{5}$ ; caudæ,  $4\frac{17}{20}$ ; rostri ad frontem,  $\frac{19}{20}$ , ad rictum,  $1\frac{1}{10}$ ; tarsi,  $1\frac{4}{5}$ .
- Fœm. Pileus olivaceo-viridis: nucha, dorsum, uropygiumque olivacescenti-virides; rhachibus plumarum pallidioribus. Genarum plumarum rhaches albæ. Gulæ plumæ albæ margine gracili fusco. Juguli plumæ in medio albidæ fusco-marginatæ, rhachibus albis: pectoris abdominis crissique plumæ flavescentes, in medio lunulâ transversâ fuscâ fasciatæ, rhachibus albis. Pteromatum remigumque secundariarum internarum apices fulvæ, tæniâ pergracili pallidâ terminatæ. Tectrices inferiores albidæ, fusco-maculatæ lunulatæque. Remiges subtus pallidè fuscescentes, basi internè fulvæ. Rectrices subtus pallidè fuscæ, basin versùs pallidiores. Rostrum nigrum. Pedes pallidè fusci. Dimensiones corporis paulò grandiores quàm in mari.
- In honorem ALEXANDRI MACLEAY, Armigeri, Societatis Linneanæ nuper SECRETARII, qui collectionem Australem avibus

bus pretiosissimis ditavit, hanc speciem nominavimus, meritas gratias solventes.

Satin Grakle. Lath. Gen. Hist. iii. p. 171. no. 30.

Mr. Caley says that "the male of this species is reckoned a very scarce bird, and is highly valued. The natives call it *Cowry*, the colonists *Satin Bird*. I have now and then met with a solitary bird of this species: but I once saw large flocks of them on some newly-sown wheat, from whence they fled, on being scared, into a neighbouring brush: when all was again quiet, they soon returned to the wheat. They did not leave the brush above a few yards. There were no black ones among them; nor can I affirm that they were feeding on the wheat."

It is singular that this beautiful and well-known bird should never have as yet received a specific name. Although it has been made the type of a genus by M. Kuhl, and published as such by M. Temminck in his "Manuel," we no where have met with a scientific name for the species. We are happy to have the opportunity of uniting with Dr. Latham in designating so distinguished a bird by the name of the late respected Secretary of this Society.

- 2. SMITHIII. Lath. MSS. Ptil. vividė viridis, subtus paulo pallidior albo-strigatus; remigum internarum pteromatumque apicibus albo-maculatis; rectricibus lateralibus apice albis, extimis fuscis virescenti-nitidis.
- Gutturis genarumque plumæ in medio albo-maculatæ; nuchæ, pectoris, abdominisque in medio albo-strigatæ. Remiges fuscæ, pogonio externo viridi-marginato; subtus pallidiores. Tectrices inferiores albidæ, fusco-fasciatæ. Rectriccs duæ mediæ totæ virides; cæteræ prope apicem fuscescentes apice ipso nigro; exteriores fuscæ, viridi-nitentes. Rostrum

Rostrum pallidum. Pedes fusci. Longitudo corporis, 12; alæ a carpo ad remigem quartam,  $6\frac{2}{10}$ ; rostri ad frontem,  $\frac{1}{2}\frac{9}{6}$ , ad rictum,  $1\frac{1}{10}$ ; caudæ,  $4\frac{3}{4}$ ; tarsi, 2.

Varied Roller. Lath. Gen. Hist. iii. p. 86. no. 17.

In honorem Viri in scientiâ illustrissimi JACOBI EDOUARDI SMITII, Equitis Aurati, Societatis Linneanæ PRÆSIDIS, Zoologiæ patroni liberalissimi, hæc speciosissima avis nominatur.

This species does not possess the velvet-like covering to the *nares* which is so conspicuous in the preceding species of *Ptilonorhynchus*. In its other characters, however, it sufficiently accords with the group; and by the deficiency in the covering of the base of the bill may be looked upon as forming the passage to the *Rollers* of Linnæus from the genus before us. The specimen in the Linnean collection was met with by Mr. Brown at Watham's River, November 1804.

## Genus. FREGILUS. Cuv.

 LEUCOPTERUS. Freg. corpore rostro pedibusque nigris, remigum pogoniis internis fasciâ albâ in medio notatis.
 Pyrrhocorax leucopterus. Temm. Manuel, p. 121.

The tail in this species of *Fregilus* is somewhat more elongated than in the typical species, and is also rounded at the end. The bill, wings and legs, however, sufficiently accord with the group, which is at present too limited to call for or admit of separation.

"This bird," Mr. Caley observes in his Notes, " is called *Waybung*' by the natives. They tell me it begins its nest by laying two sticks in a parallel manner; it then builds it up with mud or clay, and lines it with a few feathers. It is gregarious, and seems to prefer elevated situations, or such as VOL. XV. 2 M. command

command a prospect of the country. I cannot consider it as migratory."

Tribus. SCANSORES. Auct. Fam. PSITTACIDE. Leach.

The species of this family found in Australia are numerous, and they exhibit a considerable variety of form. These, with the exception of one or two groups which are equally met with in some of the adjoining islands in the Pacific Ocean, are peculiar to their own continent. They belong to two only of the five subfamilies of the *Psittacida*; those of the *Cockatoos* and the *long-tailed Parrakeets*. Hitherto we have seen no example from Australia of the true *Psittacus*, Auct., of the conterminous subfamily of *even-tailed Parrakeets*, or of the *Maccaws*.

Although from the general resemblance which the birds of this family bear to each other, it may at first sight appear difficult to determine which are the typical and aberrant groups, it strikes us that we may attain a clue to this point of distinction by attending to the construction of the bill, and tracing out the mode in which it varies from the strength and shortness apparent in some species, to the weakness and elongation exhibited The food of the Parrots consists chiefly of nuts, in others. seeds, and similar vegetable substances; and the bill, which possesses the greatest power in breaking the hard shells or rinds which inclose these substances, seems to point out the typical pre-eminence of the groups in which it is found. This strength of bill may be observed to be carried to the extreme in the two subfamilies of Cockatoos and Maccaws. In these birds the mandibles are of considerable size and thickness, and much more deep than long; more especially the under mandible, which is extremely short, and bent inwards at the apex so as to give the bill a greater power over the substances which

which it is designed to break. In speaking of the shortness of this member, we measure the space between the rictus and the apex, which in the birds to which we allude seldom equals the distance between the mentum and the same point. On the other hand, the remaining three subdivisions of the family have a longer, and consequently a weaker bill. The under mandible in particular becomes conspicuously elongated, the tomia or cutting edges being sometimes nearly straight, and the depth not equalling half the length. The bill thus assumes the general form which is found among birds, and deviates from that which appears peculiar\* to this family. In some of these longerbilled birds, which we are thus inclined to consider aberrant among the Parrots, we shall have occasion to observe a deviation also from the mode of feeding prevalent in the family by the tongue partially superseding the use of the bill. Here we may trace the first approach to the Picida, Certhiada, and the honey-feeding Tenuirostres; birds which form a conterminous group immediately succeeding the present family of Psittucida, and of which the use of the tongue is the predominant character.

According to these views we shall consider the shorter- and

\* We know no other bird in which this peculiar construction is found, except the *Fratercula Arctica*, Briss., in which species the depth of the bill from the front to the *mentum* is nearly equal to the length from the *rictus* to the *apex*. This analogical resemblance has given that bird the familiar name of *Sea-Parrot*. In some of the *Loriada* also we see an approach to the same depth and shortness of bill, but not an equal development of the character. And here also the name of *Psittarostra*, attached to one of the groups, indicates the same analogy. We may observe, that the food of the birds of this latter family is similar to that of the *Parrots*, and requires corresponding powers of bill. When we speak of the height of the bills among birds, we do not take into account those eminences which surmount the bills of some of the *Bucerida*. These give an apparent rather than a real elevation to these members, and in no wise increase their strength.

2 m 2

stronger-

stronger-billed birds as the typical group of this family, and shall commence our catalogue of the species in the Society's collection with the *Cockatoos*, or the

Subfam. PLYCTOLOPHINA.

Genus. PLYCTOLOPHUS. Vieill.

\* Cristâ plicatili, acuminatâ, antrorsum tortâ.

- 1. GALERITUS. Pl. albus; cristâ, remigum rectricumque lateralium pogoniis internis, pteromatibusque inferioribus sulphureis.
- Psittacus galeritus. Lath. Ind. Orn. p. 109. no. 80. Kuhl, Nova Acta &c. vol. 10. p. 87. no. 157.
- Crested Cockatoo. White's Journ. pl. in p. 237. Lath. Gen. Hist. ii. p. 205. no. 136.

The following observations on this species are extracted from Mr. Caley's Notes. "This bird is called by the natives Car'away, and also Cur'riang. I have met with it in large flocks at the conflux of the Grose and the Hawkesbury rivers, below Mulgo'ev on the former river, and in the long meadow near the Nepean river. They are shy, and not easily approached. The flesh of the young ones is accounted good eating. I have heard from the natives that it makes its nest in the rotten limbs of trees, of nothing more than the vegetable mould formed by the decayed parts of the bough; that it has no more than two young ones at a time; and that the eggs are white without spots. The natives first find where the nests are by the bird making Co'tora in an adjoining tree, which lies in conspicuous heaps on the ground.-Co'tora is the bark stripped off the smaller branches, and cut into small picces.-When the young ones are nearly fledged the old birds cut a quantity of small branches from the adjoining

adjoining trees, but never from that in which the nest is situated. They are sometimes found to enter the hollow limb as far as two yards. The nests are generally formed in a *Black-butted gumtree*; and also in *Coroy'bo*, *Cajim'bora* and *Yarrowar'ry* trees (species of *Eucalyptus*).—Their breeding-places appear to be local."

\*\* Cristâ rotundatâ, retrorsum incumbente.

2. Eos. Pl. pallidè cineraceus; collo, corpore subtus, tectricibusque inferioribus rosaceis; cristâ albido-rosaceâ.

Psittacus Eos. Kuhl, Nova Acta &c. vol. 10. p. 88. no. 159. Perroquet kakatoe rosalbin. Temm. Pl. Col. 81. Le Kakatoés rose. Vieill. Gal. des Ois. pl. 25.

#### Genus. CALYPTORHYNCHUS\*.

- Rostrum crassum, fortissimum, multò altius quàm longum, basi latum; mandibulæ superioris culmine compresso, a basi ascendente, maximè arcuato, apice introrsum inclinante; inferiore brevissimâ, dilatâ, fortiter emarginatâ, apice introrsum inclinante, plumis genarum præcipuè tectâ: cristâ retrorsum incumbente.
- Alæ mediocres; remigibus secundâ tertiâ quartâ et quintâ ferè æqualibus longissimis, primâ et sextâ æqualibus; secundæ ad quintam inclusam pogoniis externis medium versùs emarginatis.

Pedes subfortes, digitis unguibusque mediocribus.

Cauda subrotundata, sublonga; rectricum rhachibus apice subelongatis, nudis.

The chief difference between this genus and that of *Plycto-lophus* consists in the greater elevation and the comparative shortness of the bill. The latter group possesses a bill of

\* Καλυπτω celo, and ρυγχος rostrum.

nearly

nearly an equal length and similar construction to that of the true Psittacus\*, which immediately precedes the present subfamily. While Calyptorhynchus is allied to the Maccaws in the characters of this member, and thus evinces a higher developement than *Plyctolophus* of the typical peculiarities of the family. The culmen of the upper mandible is considerably curved and bent inwards at the apex; in some species when viewed in profile it has a semilunar appearance. The under mandible is much more dilated also than it is in *Pluctolophus*. In most specimens which we have seen of this genus the shafts of the tail-feathers are prolonged beyond the webs; a peculiarity which seems to indicate something distinctive in the economy of the birds. From all the accounts we have received of them they seem much less gregarious than the birds of the conterminous genus. The group appears to be confined to Australia. The black colour that prevails through these birds separates them also at first sight from the species of Plyctolophus, which are generally white. The species of the latter genus, which has been just enumerated in our catalogue, Pl. Eos, and the Calyptorhynchus galeatus, which will be presently noticed, both of

\* The group of the *Psittacida*, to which the name of *Psittacus* should be applied, may perhaps be considered to be that which comprises the *Psitt. Amazonicus*, Briss., and some allied species. That at least is the group best known under the old scientific term, and at the same time under the familiar names of *Parrot* in our language, and *Perroquet* in the French, which correspond with it. In general, when we subdivide a group, we ought to retain the original name for that subdivision of it which contains the typical species. There are instances, however, where this mode cannot well be followed, as when the typical species have already been distinguished by generic names. This happens to be the case in the group before us, the typical species of which were the first that were separated by distinct names. These have long been called *Macrocercus* and *Plyctolophus*, or more familiarly *Maccaws* and *Cockatoos*; and we cannot venture to disturb these established names, even for the sake of scientific correctness. The most eligible rule, next to that of selecting the typical species for the original name, is probably that of selecting the species to which it has been most familiarly applied.

which

which partially deviate from the characteristic colouring of their respective congeners, bring the two groups into immediate contact.

- 1. BANKSII. C. atro-nitens, subtus flavescenti-undulatus, capite tectricibusque flavescenti-maculatis, rectricibus lateralibus medio coccineis nigro-fasciatis subtus flavescentibus.
- Psittacus Banksii. Lath. Ind. Orn. p. 107. no. 76. Kuhl, Nova Acta &c. vol. 10. p. 90. no. 163.
- Psittacus magnificus. Shaw, Nat. Misc. pl. 50.
- Banksian Cockatoo. Lath. Gen. Hist. ii. p. 199. no. 128. pl. xxvii. Phill. Bot. Bay, pl. in p. 267. White's Journ. pl. in p. 139.

"The native name of these birds," says Mr. Caley, "is Geringora. I have met with them in various parts of the country. In the north rocks, a few miles to the northward of Paramatta, I have frequently seen them, but never many together. The natives tell me it breeds in the winter in *Mun'ning-trees*, or *Blood-trees* of the colonists (a species of *Eucalyptus*). It makes no other nest than of the vegetable mould formed by the decay of the tree. It cuts off the small branches of the *Oak-trees* (a species of *Casuarina*), but makes no *Co'tora*. It has three young ones, but of the eggs I could obtain no information."

- 2. FUNEREUS. C. niger, subtus nigricanti-brunneus, regione paroticâ flavâ, rectricibus lateralibus medio flavicantibus nigroimbutis.
- Psittacus funereus. Shaw, Nat. Misc. pl. 186. Kuhl, Nova Acta &c. vol. 10. p. 89. no. 161.

Funereal Cockatoo. Lath. Gen. Hist. ii. p. 202. no. 131.

Mr. Caley thus observes upon this bird. "Its native name is Wy'la, so called from the similitude of that word to the sound which it makes. I have never seen them together in any numbers,

bers, not more perhaps than half-a-dozen at a time : but I have met with them in many different places. Sometimes they came within half a mile of the centre of Paramatta, where I have shot them in the trees. The natives told me it made its nest in Yar'ro-trees (a species of *Eucalyptus*), using only the vegetable mould. It makes no *Co'tora*, but cuts off the small branches of *Apple-trees* (a species of *Augophora*). It has two young ones."

## 3. COOK11\*. C. niger, rectricibus lateralibus medio coccineis, rostro nigro.

\* This bird, together with five other new species of Parrots belonging to the Society's collection, were described by M. Temminck in the 13th volume of these Transactions. The same birds, and from the same collection, some of them being found exclusively in it, were also described by the late M. Kuhl in a Monograph of the family published in the " Nova Acta Physico-Medica Academia Casarea Leopoldino-Carolinæ Naturæ curiosorum," but described under different names from those of M. Temminck. A question here arises as to the respective right of these naturalists to have their names adopted. On the point of priority the case is as follows. M. Temminck's Paper was published in 1821 : M. Kuhl's bears the date of 1820. But on the other hand, M. Temminck's Paper was read before the Society on the 21st of December 1819 .- For our own parts, we have not the slightest hesitation in preferring the names of M. Temminck. We do not found our decision on the nice point of the act of reading before a chartered Society being to be considered as an act of publication; a point, however, which ought to be determined and acted upon as of much consequence to the interests of naturalists : but we go upon the broad principle, that when a naturalist has the exclusive authority to describe any subjects of Natural History, and has devoted himself to the task,-a fact of course to be ascertained from the public reading of his Paper,-any attempt to anticipate him in his descriptions, by taking advantage of the delays which sometimes unavoidably take place in the publication of extensive works, is perfectly unwarrantable, and ought decidedly to be discountenanced. Such are our views as to the general principle. In applying it to the present case, however, we must subjoin our suspicions that some mistake arose between those two gentlemen. M. Kuhl was the friend and coadjutor of M. Temminck during his visit to this country when he described the birds in question; and it is not probable that he would have interfered, unless under some misconception.

Psittacus

Psittacus Cookii. Temm. Linn. Trans. vol. xiii. p. 111. Psittacus Leachii. Kuhl, Nova Acta &c. vol. 10. p. 91. no. 164.

tab. iii.

Cook's Cockatoo. Lath. Gen. Hist. ii. p. 201. no. 130.

The colour of the bill of the two specimens of this bird in the Society's collection is a deep and decided black. M. Temminck in his Paper on these birds, in a former volume of these Transactions, says that the bill is of a lead colour,—"couleur de plomb." —We know not how to reconcile this difference: but we mention the point more particularly, as the colour of the bill appears to us, judging at least from the specimens before us, to offer a strong mark of distinction between this bird and the next, the existence of which as a separate species has been much doubted.

The specimens in our museum were not among the birds originally collected by Mr. Caley. In that gentleman's Notes, however, we find the following observations, which we make no doubt apply to this species. "The natives tell me of another kind of Cockatoo (besides Wyla and Geringora), which they call Carat'. It is very shy. It scrapes dirt out of the hollow boughs, and makes its nest as the others do. It lays two eggs, the colours of which I did not ascertain. The nest is found by watching the bird into the hole. It does not make Co'tora, nor cut off the branches of the trees : but it cuts off May'rybor'ro and Mun'mow (the fruit of two species of *Persoonia*), without however eating them, before they are ripe, to the great injury and vexation of the natives." Mr. Caley has informed us, that he recollects having shot a bird soon after his arrival in the colony, which he believes to have been of the same species as the Cal. Cookii of the Society's collection. It differed from the Wyla and Geringora in having no yellow in its plumage. He also expresses his opinion that Cal. Cookii is the Carat' of the natives.

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4. SOLANDRI? C. niger, collo corporeque inferiori brunnescentinigris, rectricibus lateralibus medio coccineis nigro-fasciatis, rostro pallido.

Psittacus Solandri? Temm. Linn. Trans. vol. xiii. p. 113. Psittacus Temminckii. Knhl, Nova Acta &c. p. 89. no. 162. Solander's Cockatoo. Lath. Gen. Hist. ii. p. 201. no. 129.

In describing and giving a name to this bird M. Temminck expresses his doubts as to its being a distinct species, or the young of the preceding C. Cookii; and he clearly states the arguments on both sides the question. As far as we can judge, it seems probable that the birds will prove distinct. But this is a mere matter of fact, which we hope shortly will be ascertained: and as such we leave it to time, without indulging in conjecture.

5. GALEATUS. C. cineraceus viridi-splendens, albido-variegatus, rectricibus albido fasciatim undulatis, cristâ maris coccineâ.

Psittacus galeatus. Lath. Ind. Orn. Supp. p. xxiii. no. 13. Kuhl, Nova Acta &c. vol. 10. p. 88. no. 160.

Red-crowned Parrot. Lath. Gen. Hist. ii. p. 218. no. 152. pl. xxviii.

Subfam. PALEORNINA.

Genus. NANODES\*.

- Rostrum breve culmine rotundato, altius quàm longum, generis Macrocerci rostro persimile; mandibulâ inferiori brevissimâ, introrsum inclinante, emarginatâ.
- Alæ mediocres, subacuminatæ; remigibus primå et secundå ferè æqualibus longissimis, secundæ et tertiæ pogoniis externis apicem versùs leviter emarginatis.

Pedes mediocres; tarsis digitisque subgracilibus.

Cauda gradata, cuneata; rectricibus apicem versús gracilioribus.

\* Navwong nanus.

We have already observed, that no species of the subfamily Macrocercina, or the Maccaws, the next succeeding group to the subdivision of Cockatoos which we have just guitted, has been found in Australia. Neither has the recently-described genus Psittacara, V., or the Perruche-Aras of M. Le Vaillant, which connects the Maccaws with the present subfamily of Palæornina, been met with in that country. New Holland, however, supplies the next link in the chain of affinities; and in a singularly beautiful assemblage of birds, diminutive in their size, but brilliant and attractive in their plumage, affords the representatives of the New World Macrocercus. These birds, or the genus Nanodes, the characters of which we have given above, have the bill and general form of Macrocercus; and, with the exception of the naked cheeks, appear perfect Maccaws in miniature. The first species enumerated, N. discolor, may be considered the type of the group. The two last species will be found partially to deviate from this type, as we shall observe in its place, and to form the passage to the succeeding genus\*.

#### 1. Dis-

\* The above group is as nearly alied to Pezoporus as to Platycercus; and it might perhaps, in a rude distribution of species, be included in that genus from a conformity in general appearance and habits. We are induced to keep it separate, in consequence of its close affinity to the Maccaws, and for the purpose of more strongly marking out. by such a generic separation, one of the intervening gradations by which the species of this extensive family are beautifully connected with each other. Nanodes with Platycercus and Pezoporus form a natural group, the species of which return into themselves in a circular succession; and they thus constitute a minor subdivision of the present subfamily. We take this opportunity of pointing out the other subdivisions with which it is connected. The subfamily of Palaornina comprises, first, the Parrakeet Maccaws of South America, or the genus Psittacara, V.; secondly, the present Australian group of Ground Parrakeets, including Nanodes, Platycercus, and Pezoporus, and connected with the preceding Parrakeet Maccaws by Nanodes discolor; thirdly, the Indian group of Palaornis, which is united with the Ground Parrakeets by means of the New Holland species Pal. Barrabandi; fourthly, the Parrakeets whose tongue is filamentous, such as the Australian and Indian genera Trichoglossus and Lorius, which 2 N 2 ioin

 DISCOLOR. N. viridis; tæniå frontali, gulå, maculis pectoralibus abdominalibusque, tectricibus inferioribus, crissoque coccineis; capitis vertice, alulå, pteromatibusque azureo-cæruleis; ptilis caudâque purpurascenti-ferrugineis.

Psittacus discolor. Lath. Ind. Orn. Supp. p. xxi. no. 6.

Perruche Banks. Le Vaill. Hist. des Perr. pl. 50.

Red-shouldered Parrakeet. White's Journ. pl. in p. 263. Phill. Bot. Bay, pl. in p. 269. Swains. Zool. Illust. pl. 62. Lath. Gen. Hist. ii. p. 176. no. 90.

One of our specimens of this species was brought by Mr. Brown from the banks of the Derwent, where he obtained it in 1804. It appears to be the bird from which the late M. Kuhl took the description of his *Psittacus australis* (p. 48. no. 74). He refers to a specimen in the Linnean Society's collection, and there is no other bird in that collection which accords with his description. We do not observe any material difference between our specimen and the Psitt. discolor of Dr. Latham. The front is somewhat more vellow than is usual in the species; and when the bird is compared with M. Le Vaillant's figure, in which the front is pure scarlet, a slight difference appears, which may have given rise to M. Kuhl's separating the two birds. In most of the birds, however, which are considered to belong to M. Le Vaillant's species Perruche Banks, and Dr. Latham's P. discolor, a greater or less proportion of this yellow marking is discernible. M. Le Vaillant's figure appears to us too highly coloured. Mr. Swainson's is an excellent representation of the bird. There

join Palacornis by the osculant species Pal. Papuensis; and fifthly, the species of various countries, known by the general title of Perruches proprement dits, including Brotogeris, V., united to Lorius of the last subdivision by Psitt. fringillaceus, Lath., and leading round again to the first subdivision of Parrakeet Maccaws by some American species, whose bills gradually shortening, and becoming stronger, indicate an approaching affinity to that group.

seems

seems to be some confusion in respect to M. Kuhl's reference to P. discolor of the "Index Ornithologicus." He refers that name to the Perruche Latham of M. Le Vaillant (pl. 62.), Psitt. Lathami, Bechst., an apparently distinct species; and he assigns the denomination of Psitt. humeralis, Bechst., to the Psitt. discolor, or Red-shouldered Parakect of Latham, White, and Phillips.

- 2. UNDULATUS. N. obscuré viridis fusco-variegatus, subtus pallidé viridis; capite, nuchâque flavescenti, fasciis perangustis fuscis undulatis; maculâ genarum azureâ; rectricibus cæruleo-viridibus, lateralibus fasciâ flavâ in medio notatis.
- Psittacus undulatus. Shaw, Nat. Misc. pl. 673. Kuhl, Nova Acta &c. vol. 10. p. 49. no. 76.

Undulated Parrot. Lath. Gen. Hist. ii. p. 179. no. 95. pl. 26.

- 3. PULCHELLUS. N. viridis, subtus flavus; fronte, genis, tectricibusque lazulinis, remigibus azureis, rectricibus lateralibus flavis, humeris maris sanguineo-purpureis.
- Psittacus pulchellus. Shaw, Nat. Misc. pl. 96. Kuhl, Nova Acta &c. vol. 10. p. 50. no. 79.

Perruche Edwards. Le Vaill. Hist. des Perr. pl. 68. 2.

Turcosine Parakeet. Swains. Zool. Illust. pl. 73. 3. Lath. Gen. Hist. ii. p. 185. no. 104.

The bills of this species and of the next are in a slight degree more rounded at the *culmen* than that of the typical species N. discolor: the wings are also somewhat less acuminated, and the tail flatter and more rounded at the *apex*. In these particulars it evinces a gradual approach to the next genus, *Platycercus*. The birds of this latter genus are observed to feed upon the ground; and the two species now before us are generally found in a similar situation as we are informed by Mr. Caley. But

But they are not equally well adapted to the ground as the species of *Platycercus*, not having an equal length of *tarsus*, or the same shortness and roundness of wing. The gradual approach, however, of the two genera, both in characters and habits, is singularly conspicuous.

Mr. Caley says of this species,—" The native name I have forgotten. The settlers call it *Ground Parrot*. It feeds upon the ground. Great care is required in taking off the skin, from its being particularly fine and thin, and readily torn. The crop is generally full of small grass-seeds; and should it be cut or torn, so as to let these seeds out among the feathers, it is with difficulty they are got off again, from their having become glutinous in the stomach. The natives tell me it chiefly breeds in a stump of a small *White Gum-tree*, making no other nest than of the decayed parts of the tree. It has eight young ones. The eggs are white without spots."

4. VENUSTUS. N. olivaceo-viridis, subtus flavus, tæniå frontali, tectricibus, rectricibusque lazulinis, harum apice, loris, periophthalmiisque flavis, remigibus nigris.

Psittacus venustus. Temm. Linn. Trans. vol. xiii. p. 121.

Psittacus chrysostomus. Kuhl, Nova Acta &c. vol. 10. p. 50. no. 78. tab. 1.

Blue-banded Parakeet. Lath. Gen. Hist. ii. p. 188. no. 109.

Mr. Caley informs us that this bird is called by the settlers Hobart Ground Parrot. The native name he has not ascertained. Our male specimen was brought by that gentleman from Van Diemen's Land; the female was procured by Mr. Brown at King George's Sound.

Genus. PLATYCERCUS\*.

Rostrum breviusculum, mandibulå superiori rotundatå dilatatå,

\* MLATUS latus, and REGROS cauda.

inferiori

inferiori brevi profundè emarginatâ, apice quadrato, myxâ convexâ glabrâ.

- Alæ rotundatæ; remige primâ secundâ breviori, quintæ præcipuè æquali; secundâ et tertiâ longissimis: omnium, primâ exceptâ, pogoniis externis abruptè medium versùs emarginatis.
- Cauda lata, depressa, subrotundata aut subgradata; rectricibus apice subrotundis.
- Pedes; tarsis elevatis; digitis gracilibus, elongatis; unguibus longis, parum falcatis.

The chief difference between the typical species of this genus and those of the preceding, lies in the roundness and comparative shortness of the wing, and the elevation of the tarsi of the former. Other more minute distinctions may be also detected sufficient to separate the groups; such as the more rounded culmen of the bill of Platycercus, the breadth and depression of the tail; the abrupt emargination of the webs of the quillfeathers, &c.: but the former characters of the wings and tarsi are the most decisive, as indicating the greater developement of the characters of these neighbouring groups. These characters at once point out the terrestrial habits of Platycercus. And they not only show that the food of the birds of that genus is found upon the ground, but they evince their superior activity and greater freedom of action, when compared with the remaining groups of the family, whose gait is awkward and embarrassed, and who seem to possess no powers of motion on the ground. The species enumerated in this genus accord in general with the above characters taken from Pl. Pennantii, which may be considered the type; with the exception of Pl. scapulatus, or King's Parrot, which exhibits some slight deviation from the characters of the bill. This difference, however, is not of sufficient

sufficient importance to cause us to separate it from the group, with which it generally accords in habits and external appearance.

1. PENNANTII. Pl. coccineo-sanguineus, dorso scapularibusque nigris coccinco-marginatis; gulâ tectricibus caudâque lazulinis, remigibus nigris lazulino-marginatis.

Psittacus Pennantii. Lath. Ind. Orn. p. 90. no. 26.

Psittacus gloriosus. Shaw, Nat. Misc. pl. 53.

Psittacus splendidus. Id. Lcv. Mus. tab. 7.

Perruche à large queue. Le Vaill. Hist. des Perr. pl. 78. juv.

Pennantian Parrot. Phill. Bot. Bay, pl. in p. 154. White's Journ.

pl. in p. 174. Lath. Gen. Hist. ii. p. 131. no. 34.

Psittacus elegans. Gmel. i. p. 318. no. 59. Kuhl, Nova Acta &c. vol. 10. p. 55. no. 89.

Perruche à large queue. Le Vaill. Hist. des Perr. pl. 79.

"This species," says Mr. Caley, "is called by the natives *Dulang*' and *Julang*'. Like the *King's Parrot* (*Pl. scapulatus*), . it is found in large flocks among the ripe Indian corn, both species being intermixed. It varies much in colour: but as the greater part of the flock is of the colour of the female, it may almost be taken for granted that they are young birds.—The natives tell me it makes its nest chiefly in the *Peppermint-tree* [*Eucalyptus piperita*], always in the body, but never in the boughs. Sometimes it enlarges the hole through which it enters. Year after year the same place is frequented for the purposes of incubation. It makes no nest but from the decayed parts of the tree. It has four young ones. The eggs are white.

"I have met with this bird in November in the most mountainous parts of the country: but I apprehend it leaves these parts in the winter."

- 2. FLAVIVENTRIS\*. Pl. nigro viridique varius, capite postico corporeque subtus flavescentibus, fronte coccineo, gulâ tectricibus rectricibusque lateralibus lazulinis, remigibus nigris lazulino-marginatis.
- Psittacus flaviventris. Temm. Linn. Trans. vol. xiii. pp. 116-118.

Psittacus Brownii. Kuhl, Nova Acta &c. vol. 10. p. 56. no. 90. Perruche à large queue, var. Le Vaill. Hist. des Perr. pl. 80. Van Diemen's Parrot? Lath. Gen. Hist. ii. p. 130. no. 33.

"This bird," Mr. Caley tells us, "was common at the settlement near Hobart Town in Van Diemen's Land. It is also met with, as I understand, in New Caledonia. I know nothing of its habits." Dr. Latham expresses a doubt whether his Van Diemen's Parrot is the same as M. Temminck's species. It appears to us that they are the same, and that the description of the Sulphur-headed Parrot (Gen. Hist. p. 133. no. 35.) appertains also to the same species.

3. EXIMIUS. Pl. nigro flavo viridique varius, collo pectore crissoque coccineis, gulà albâ, tectricibus rectricibusque lateralibus lazulinis, remigibus nigris lazulino-marginatis.

Psittacus eximius. Shaw, Nat. Misc. pl. 96. Zool. of New Holl. t. 1. Kuhl, Nova Acta &c. vol. 10. p. 54. no. 87.

Perruche omnicolore. Le Vaill. Hist. des Perr. pl. 28. 29. Nonpareil Parrot. Lath. Gen. Hist. ii. p. 139. no. 41.

In Mr. Caley's MSS. are the following observations on this bird. "Rosehill Parrot.—So called from the name of the set-

\* M. Temminck originally gave the specific name of *flavigaster* to this bird (*Linn. Trans.* xiii. p. 116.); but as he himself subsequently referred to it (p. 118.) under the name of *flaviventris*, we have no scruple in adopting the latter title in preference to the former, which is obviously liable to objections.

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tlement afterwards known by the name of Paramatta. The native name of the bird is *Bundullock*.

"The natives inform me it always breeds in dead trees, chiefly on farms, making its nest with feathers in the body of the hollow tree. To whatever depth the tree may be hollow, the bird always descends to the bottom, like an *Opossum*. Its nest is found by watching the old bird; and sometimes by hearing the young ones in the hollow of the tree on passing by. It has six young ones; the eggs are white without spots.

" It may frequently be seen in small flocks along with the King's Parrot (Pl. scapulatus) and the Lory (Pl. Pennantii) in fields of Indian corn : but I never recollect it taking the corn from the stalk like the other two birds, and I suspect it only picks up what the others throw to the ground. I have seen the most of this species on new-sown wheat early in the morning; but never in large flocks. I do not recollect ever to have seen the King's Parrot or Lory pulling up the young wheat like this bird. All three species are caught in traps. They are very good eating. The King's and Rosehill Parrots are the most valuable for selling to ships to take to England. I do not know whether the Lory does so, but I remember shooting that species at Western Port, on the opposite side of the strait."

4. BROWNII. Pl. flavescenti-albidus, nigro variegatus; capite scapularibusque nigris, alis caudâque lazulinis, genis albis subtus cæruleo-marginatis, crisso coccineo.

Psittacus Brownii. Temm. Linn. Trans. vol. xiii. p. 119. Psittacus venustus. Kuhl, Nova Acta &c. vol. 10. p. 52. no. 83. Brown's Parrot. Lath. Gen. Hist. ii. p. 139. no. 42.

This species, which may perhaps be considered, from the extreme delicacy of its colours, as the most beautiful of the family,

family, was discovered by Mr. Brown, whose name it justly bears, at Arnheim Bay.

5. BAUERI. Pl. viridis, capite nigro, torque nuchali abdomineque imo flavis, pteromatibus remigibusque lazulinis apicibus nigris, rectricibus lateralibus apice cæruleis.

Psittacus Baueri. Temm. Linn. Trans. vol. xiii. p. 118.

Psittacus cyanomelas. Kuhl, Nova Acta &c. vol. 10. p. 53. no. 84.

Bauer's Parrot. Lath. Gen. Hist. ii. p. 120. no. 21.

The fine specimen of this species in the collection was met with by Mr. Brown at Memory Cove on the South coast.

6. BARNARDI. Lath. MSS. Pl. lætè viridis, fronte coccineo, fascià occipitali brunnescenti-fuscà, dorso cærulescenti-nigro, torque nuchali interrupto flavo, genis pteromatum rectricumque apice lazulinis, humeris remigum margine rectricumque lateralium basi azureis.

- In honorem EDOUARDI BARNARD, Armigeri, Societatis Linneanæ Socii, Ornithologiæ studiosissimi, hæc species, quam Societas liberalitati ejus debet, nomen accipiat.
- 7. MULTICOLOR. Pl. viridis, fronte humeris femoribus crissoque aurantiaco-flavis, fascià occipitali purpureo-brunneà, pteromatibus remigibusque externè azureis.
- Psittacus multicolor. Temm. Linn. Trans. vol. xiii. p. 119. Kuhl, Nova Acta &c. vol. 10. p. 55. no. 88.

Varied Parrot. Lath. Gen. Hist. ii. p. 182. no. 98.

This bird was procured by Mr. Brown at Spencer's Gulf, South coast.

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8. Ery-

Barnard's Parrot. Lath. Gen. Hist. ii. p. 121. no. 23.

8. ERYTHROPTERUS. Pl. viridis subtus flavescenti-viridis, dorso scapularibusque nigris, tectricibus coccineis, fascià dorsali lazulinà.

Psittacus erythropterus. Gmel. Syst. i. p. 343. no. 120. Kuhl, Nova Acta &c. vol. 10. p. 53. no. 85.

Psittacus melanonotus. Shaw, Nat. Misc. pl. 653.

Perruche érythroptere. Quoy et Gaymard, Voy. aut. du Monde, pl. 27.

Crimson-winged Parrot. Lath. Gen. Hist. ii. p. 253. no. 198.

A female of this species, presented to the Society by Mr. Brown, was obtained in an island of the Gulf of Carpentaria in December 1802.

9. SCAPULATUS. Pl. viridis, capite collo corporeque subtus coccineis, lunulà nuchali uropygioque lazulinis, lineà scapulari longitudinali pallidè viridi-cæruleà, rectricibus nigris viridi splendentibus.

Fœm. Capite pectoreque viridibus.

Psittacus scapulatus. Bechst. Kuhl, Nova Acta & c. p. 56. uo. 91. Psittacus Tabuensis, var. β. Lath. Ind. Orn. p. 88. no. 19.

Grande Perruche à collier et croupion bleue. Le Vaill. Hist. des Perr. pl. 55. 56.

Tabuan Parrot. White's Journ. pl. in p. 168. d. in p. 169. g. Phill. Bot. Bay, pl. in p. 153.

Mr. Caley could not inform us of the native name of this bird. "It was seldom," he tells us, "that I noticed a full coloured specimen, viz. red. When the Indian corn is ripe they may be seen in large flocks, on the farms, clinging on the stalks, and occasioning much mischief to the corn. I apprehend that the greater part of these flocks are young birds, as it is rare to see a bright-red one among them.—The natives tell

me

me it breeds chiefly in a *white Gum-tree* (a species of *Eucalyp-tus*), making its nest of a little grass, and lining it with feathers. It has as many as twelve young ones. The eggs are of a dirty-white with black specks. The nest is found by the bird enlarging the hole to creep in at. This process gives the surrounding part a reddish appearance, which, forming a contrast with the whiteness of the other parts, renders it conspicuous."

## Genus. PEZOPORUS. Ill.

The birds of this genus, which was first characterized by M. Illiger, differ essentially from those of the last by the form of the tail, which, instead of being broad and depressed, is narrow and cuneated, and has the feathers pointed at the *apex*. The toes also seem even still more appropriated to the ground than those of *Platycercus*, being longer and straighter, and the nails being less falcated. The outer webs of the quill-feathers are less indented, and the indenture is nearer the *apex*; while the under mandible also exhibits a slighter emargination than in the latter genus, thus evincing a greater recession from the groups that approach the *Maccaws*. There has hitherto been but one species discovered of the genus, which appears confined to New Holland.

- 1. FORMOSUS. P. viridis, capite nigro-lineato, dorso alis pectoreque maculis nigris lunulatis flavo-marginatis, corpore subtus rectricibusque flavo viridique fasciatis, tæniå frontali coccineâ, remigum fasciâ interruptâ flavâ.
- Psittacus formosus. Lath. Ind. Orn. p. 103. no. 60. Kuhl, Nova Acta &c. p. 43. no. 64.
- Psittacus terrestris. Shaw, Zool. of New Holl. pl. 3. Nat. Misc. 228. Lev. Mus. tab. 55.

Perruche ingambe. Le Vaill. Hist. des Perr. pl. 32.

Ground Parrot. Lath. Gen. Hist. ii. p. 137. no. 40.

There

There was no specimen of this species in the collection originally brought to this country by Mr. Caley. That gentleman, however, makes the following reference to this bird, when speaking of the *N. pulchellus*. "What is called the *Ground Parrot* at Sydney inhabits the scrubs in that neighbourhood. I have also seen it in similar situations elsewhere. I have never seen it except on the wing; it having started up before me, taking a short flight, and alighting among the bushes, but never to my knowledge upon them."—Our specimen was obtained by Mr. Brown at Port Phillip, January 25th, 1804.

#### Genus. PALÆORNIS\*.

Rostrum subcrassum ; mandibulâ superiore dilatatâ, culmine rotundo : inferiore latâ, brevi, emarginatâ.

Alæ mediocres; remigibus tribus extimis ferè æqualibus, longissimis; secundæ tertiæ et quartæ pogoniis externis in medio gradatim latioribus.

Cauda gradata; rectricibus duabus mediis gracillimis, cæteras longitudine magnoperè excedentibus.

Pedes; tarsis brevibus, debilibus; unguibus mediocribus, subgracilibus, falcatis.

Corpus gracile, concinnum.

The birds of this genus, which are of peculiar interest as having formed the group of *Parrots* known to the ancients, are distinguished at once from those of the conterminous genera by the form of the tail, in which the two middle feathers considerably exceed the others in length. Other distinguishing characters may also be observed on comparing the generic descriptions. The group belongs chiefly to India, and some of the neighbouring islands in the Indian Ocean. One species only has been found in New Holland. This seems to possess

\* Παλαιος antiquus, and ogvis avis.

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the general characters of *Palacornis*; but the *tarsi* are more elongated than is usual in the genus. In this aberration of character we may trace a beautiful connection between the *Ground Parrakeets* of Australia, and the more typical birds of the present genus belonging to the continent of India.

 BARRABANDI. Pal. viridis, sincipite gulâque aureo-flavis, torque pectorali maculisque femoralibus coccineis.
 Psittacus Barrabandi. Swains. Zool. Illust. pl. 59.
 Scarlet-breasted Parrot. Lath. Gen. Hist. ii. p. 121. no. 24.

Genus. TRICHOGLOSSUS\*.

Rostrum subelongatum, compressiusculum: mandibulâ inferiori subrectâ, margine integrâ, longiori quàm altâ.

Lingua setis plurimis marginalibus ad apicem subtus instructa. Alæ mediocres; remige primå longissimå, secundå et tertiå paulò

brevioribus, pogoniis integris.

Pedes subbreves ; tarsis plumis femoralibus aliquatenus opertis ;
 acrotarsiis infra genu paululum plumosis ; digitis subfortibus, depressis, lomatinis ; unguibus fortibus, falcatis.
 Cauda gradata ; rectricibus apice angustioribus.

Besides the external characters, specified above, which separate this genus from the rest of the present subfamily, a decided ground of distinction is exhibited in the formation of the tongue. The under part of this member is furnished at the *apex* with numerous strong hairs or bristles, of a brush-like structure; and which seem to serve the bird for the purposes of suction. The tendency of a considerable portion of the birds of New Holland to feed by suction upon vegetable juices, for which a sufficient provision is made by nature in the luxuriant vegetation and the constant succession of flowers in that country, ren-

\* Opit seta, and yrwssa lingua.

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ders this singular deviation from the general form of the *Parrot's* tongue less surprising. Our characters of the tongue are drawn from a specimen belonging to a species of this genus, which was for some time alive in this country: and our inferences concerning its use are strongly confirmed by the observations of Mr. Caley on the manners of some species, extracts from which will accompany our descriptions of the birds. It is to be remarked, that although the *Parrots* are in general a long-lived race, and of all birds perhaps the most easily reared, and although the birds of the present group are most numerous in New Holland, few of them have been kept alive for any length of their natural mode of feeding has occasioned this difficulty in rearing them.

We have reason to believe that the next adjoining group of the present subfamily, the genus Lorius of the Eastern Islands, is endowed with a similar formation of tongue. These two united groups include some of the birds which exhibit the most elongated and the weakest bills in the family : and the deviation evinced from the general mode of feeding of the family confirms our conjectures that the birds which are distinguished by such characters of the bill are the most aberrant in the group; while the birds which possess the opposite characters, viz. strength and shortness of bill, are the most typical. It is also to be observed, that the next allied group of the Order of Insessores which adjoins the Parrots, and to which the two aberrant genera at present before us approach most nearly of all that family, is distinguished by the tongue entirely superseding the general functions of the bill in procuring sustenance. The partial use of the tongue in these two genera of Psittacida, thus affords an addition to the numberless beautiful instances in which nature blends together the characters of her conterminous groups.

1. HÆ-

- 1. HEMATODUS. Tri. viridis, capite collo abdomineque medio purpurascenti-azureis; pectore coccineo flavo-variegato, tectricibus inferioribus coccineis, lunulà nuchali fasciâque remigum subtus flavis.
- Fæm.? Pectore coccineo, azureo-fasciato.
- Psittacus hæmatodus. Linn. Mant. 1771. p. 524.
- Perruche des Moluques. Pl. Enl. 743.
- Perruche d'Amboine. Ib. 61. 2.
- Perruche à tête bleue. Le Vaill. Hist. des Perr. pl. 24. 5. 25. 9. 26. juv. 27. var.
- Blue-bellied Parrakeet. Brown, Illust. of Zool. pl. 7. Phill. Bot. Bay, pl. in p. 152.
- Red-breasted Parrot. Lath. Gen. Hist. ii. p. 122. no. 26.

Mr. Caley informs us, that "this bird is called War'rin by the natives, and by the settlers Blue Mountain Parrot. The young birds of this species are taken by the natives, who sell them to the settlers inhabiting the banks of the Hawkesbury, and the neighbourhood of Richmond Hill ; which latter settlement being situated at the foot of the mountains, the above name has been given to the bird. The name however is misapplied, for this species does not frequent the mountains; at least I have never met with it there during the various times and the different seasons that I visited those parts. It is a bird remarkable for its docility and attachment to some people, although a perfect scold to others, who may have teazed or offended it .- Flocks of these birds may be seen in the Eucalypti trees when in flower, in different parts of the country, but in the greatest number near their breeding-places. It does not eat any kind of grain, even when in a domesticated state. It is much subject to fits, which generally prove fatal; and it is rare to find an individual kept alive above a couple of years. One that I kept, on being VOL. XV. 2 P shown

shown a figure of a coloured plant, used to put its tongue to the flowers, as if with the intent of sucking them : and I have seen it make the same attempt with a piece of cotton furniture. The flesh of this bird is very good eating."

Although, according to general custom, we have referred our New Holland birds of this species to the Psitt. hæmatodus of Linnæus, we have strong doubts as to their being the same species. It is not, however, in our power at present to make any decisive observations on this point, as we have not been able to procure a sufficient number of authentic specimens of the Molucca birds, from whence Linnæus's original description was taken, to compare with our Australian specimens. We have also to add, that a bird agreeing with the above description of the female of this species, which we have marked with a note of doubt, was brought from New Holland, and presented to the Society as the female of the Blue Mountain Parrot. This bird accurately accords with M. Le Vaillant's figure of the female of the Perruche à tête bleue. We are of opinion, however, that it will prove to belong to a very distinct species. Mr. Caley, whose observations on the spot were most accurate, informs us that he noticed little difference in plumage between the sexes of the Blue Mountain Parrot. And among hundreds of skins of this species, which have come under our own observation, we have never seen a second specimen agreeing with the bird to which we allude. It is not probable that one sex should be so common in the collections sent home to this country, and the other sex, equally attractive in plumage, be so extremely rare.

2. CAPISTRATUS. Tri. viridis, pileo gulâque purpurascenti-azureis, pectore coccineo-aurantio, tectricibus inferioribus coccineis, torque nuchali fasciâque remigum subtus flavis.

Psittacus

Psittacus capistratus. Bechst. Kuhl, Nova Acta &c. vol. 10. p. 35. no. 44.

Perruche à face bleue. Le Vaill. Hist. des Perr. pl. 47.

- 3. RUBRITORQUIS. Tri. viridis, capite genis gulâque cæruleis, pectore tectricibus inferioribus torqueque nuchali aurantiococcineis, hoc azureo-variegato, maculâ abdominali azureoviridi, fasciâ remigum subtus abdomineque infimo flavis.
- Caput totum cæruleo-splendens. Torquis nuchalis plumæ coccineæ, ad apicem azureo-marginatæ. Remigum pogonia interna fusca, maculâ longâ longitudinali marginata. Femorum caudæque tectrices flavæ, viridi variæ. Rectrices virides, subtus flavescenti-virides, pogoniis internis, mediis exceptis, ad basin flavo-marginatis. Longitudo corporis,  $9\frac{7}{10}$ ; mandibulæ superioris ad rictum,  $\frac{4}{5}$ , inferioris,  $\frac{11}{20}$ ; alæ a carpo ad remigem primam,  $5\frac{7}{10}$ ; tarsi,  $\frac{11}{20}$ ; digiti antici externi, ungue incluso,  $1\frac{1}{6}$ .

This species approaches very nearly to the two preceding; but it may at once be distinguished from them by the colour of the nuchal collar, which is scarlet, with the feathers margined by deep blue. The colour of the head is of a paler azure, and that of the breast and inner wing-coverts is more of an orange and less of a scarlet than in *Trich. hæmatodus*.

4. MATONI. Lath. MSS.\* Tri. viridis, pectore abdomine nuchâque flavo coccineoque variis, tectricibus inferioribus fasciâque remigum subtus coccineis.

\* There is a species described by M. Kuhl in his Monograph on this family (*Psitt. chlorolepidotus, p.* 48. no. 75.), which he refers to as being in the Linnean Society's collection, and which bears some resemblance in characters to the present species. The description, however, is not sufficiently accordant with our bird to lead us at once to conclude that it is intended for it. The species described above is extremely common, and in every extensive collection.

**C**apitis

Capitis pileus viridis, cæruleo splendens: gula, genæque cærulescenti-virides. Pectoris, abdominis medii, nuchæque plumæ ad basin flavæ, coccineo parcè variegatæ, fasciâ apicali viridi latâ marginatæ. Remigum pogonia interna fusca, omnium, primâ exceptâ, maculâ aurantio-coccineâ in medio notata, his maculis fasciam subtus formantibus. Rectrices virides, subtus pallidè fuscæ, pogoniis internis omnium, duabus mediis exceptis, ad basin aurantiaco-coccineis. Rostrum rubro-flavum. Pedes nigri. Longitudo corporis,  $9_{10}^{3}$ ; alæ a carpo ad remigem primam,  $5_{10}^{1}$ ; mandibulæ superioris ad rictum et ad ceram,  $\frac{3}{5}$ , inferioris,  $\frac{1}{2}$ ; tarsi,  $\frac{3}{5}$ ; digiti antici externi, ungue incluso,  $\frac{9}{10}$ .

Spotted Parrot. Lath. Gen. Hist. ii. p. 197. no. 123.

- In honorem GULIELMI MATON, Medicinæ Doctoris, Societatis Linneanæ PRO-PRÆSIDIS, in Zoologiâ eximii judicis, hæc species pulchra generis pulcherrimi nomine distinguatur.
- 5. CONCINNUS. Tri. viridis; fronte, tæniâ postoculari descendente, rectricumque basi intus coccineis; occipite cærulescente, maculâ laterali subtus flavâ; nuchâ interscapulioque olivaceis.

Psittacus concinnus. Shaw, Nat. Misc. pl. 87. Kuhl, Nova Acta &c. vol. 10. p. 46. no. 70.

Psittacus australis. Lath. Ind. Orn. p. 104. no. 66. Perruche à bandeau rouge. Le Vaill. Hist. des Perr. pl. 48. Crimson-fronted Parrakeet. Lath. Gen. Hist. ii. p. 181. no. 97.

"This species," Mr. Caley observes, "is called by the natives *Coolich*. It may be observed in large flocks sucking the *Eucalypti* flowers. Like the *Blue Mountain Parrot* it is subject to fits, which generally prove fatal. It is but seldom kept alive. Its breath, or some part about its head, emits a very sweet odour.

"The

"The natives tell me it breeds in the hollow boughs of trees, scraping out the decayed mould and making its nest of it. It has two young ones. The eggs are green without spots."

6. PUSILLUS. Tri. viridis; fronte, gulâ, regione rostrali, rectricumque basi intus coccineis; lunulâ nuchali olivaceo-brunneâ, interscapulio olivaceo-viridi.

Psittacus pusillus. Lath. Ind. Orn. p. 106. no. 71. Kuhl, Nova Acta &c. vol. 10. p. 47. no. 71.

Perruche à face rouge. Le Vaill. Hist. des Perr. pl. 63.

Small Parrakeet. White's Journ. pl. in p. 262. Lath. Gen. Hist. ii. p. 194. no. 118.

"The native name of this bird is Jerryang'. This, like Coolich, is seen in very large flocks in the Eucalypti trees when in blossom. The natives now and then bring in the young ones, but they seldom live long. I had three young ones for some time, which used to huddle together and give out a very pleasing note. They all died strongly convulsed, and nearly at the same time; the limbs were as stiff the moment life was extinct, as if the body had become cold.—The natives tell me it builds in the hollow limbs of trees, making no other nest than of the decayed wood. It has four young ones. The eggs are white and without spots."—Calcy's MSS.

Mr. Caley adds, "that he has learned from the natives that the nest of this species, of the Ground Parrot (N. pulchellus), of the Dulang' (Pl. Pennantii), and of the Coolich (Tri. concinnus), smell very strong and offensive of their dung."

#### Fam. CERTHIADÆ.

The true scansorial birds have been very sparingly found in New Holland. Hitherto no species of the family of *Picida* has been discovered in that vast continent; and of the present family

family of Certhiadæ a few Australian species only have as yet been sent home to us. It is however to be observed, that a neighbouring family to the present, that of the Meliphagida, of which a considerable variety of forms and a number of species occur in Australia, possesses one of the grand characteristics of the scansorial birds, a strong and lengthened hallux. And it consequently becomes a question whether these birds, distinguished by such a peculiarity which separates them from all the other honey-eating birds of the Old and the New World, may not for the most part supply the place of the more typical *climb*ing birds in that fifth division of the globe. The peculiar vegetation of the country, which seems to unite to so great an extent the strength of the forest-tree with the blossoms of the shrub, serves in some measure to strengthen such a conjecture, and to account for this singular union of characters, as administering at once to the purposes of the birds which represent the scansorial and mellivorous tribes.

The following genus, which holds the same place in Australia as the true *Certhia* fills in the ancient continent, and the numerous group of *Dendrocolaptes*, Herm., in South America, is the first which presents itself of this family. It possesses the strong and lengthened shafts of the tail-feathers which support the typical *scansorial* birds in climbing, and immediately connects the whole group by a strong affinity with the *Woodpeckers*.

## ORTHONYX. Temm.

- 1. TEMMINCKII. Orth. rufo-brunneus; capite, regione nuchali, interscapulioque nigro-variegatis; tectricibus nigris apice albido; gutture, pectore, abdomineque medio albis.
- Caput rufo-brunneum nigro-lineatum, strigâ laterali oculos includente griseâ. Guttur parcè nigro undulatum. Nucha interscapuliumque strigis latis nigris notatæ; illius lateribus

bus maculis nigris ad pectus ferè extendentibus utrinque instructis. Remiges fusco-brunneæ, pogoniis externis basi albis, deinde fasciâ fusco-nigrâ notâque ferrugineâ approximante instructis : subtus, tectricesque inferiores, brunnescenti-fuscæ. Rectrices brunneæ, rhachibus nigris ; subtus brunnescenti-fuscæ. Rostrum nigrum. Pedes pallidè fusci. Longitudo corporis,  $7\frac{1}{10}$ ; alæ a carpo ad remigem quintam,  $3\frac{1}{20}$ ; caudæ,  $3\frac{3}{4}$ ; rostri ad frontem,  $\frac{1}{2}$ , ad rictum,  $\frac{4}{5}$ ; tarsi,  $1\frac{1}{2}$ .

In honorem Ornithologici celeberrimi, Domini C. J. 'TEMMINCK, Societatis Linneanæ Socii Peregrini, qui primùm hoc genus characteribus illustravit, hæc species nominatur.

M. Temminck in his "Manuel" refers to a species which he gives as the type of this genus, and which he describes as darkbrown above with black spots, the male having a red throat surrounded with black; the female with a white throat. We suspect our bird to be the female of this species. M. Temminck has not named his bird; and we consequently take this opportunity of assigning it the name of a naturalist, to whom we are indebted for the characters of the group itself, and for many other valuable additions to Ornithology.

The Society's specimen was presented to them by Mr. Brown, who met with it near Hat Hill in the year 1804.

## Genus. CLIMACTERIS\*. Temm.

1. PICUMNUS. C. fusco-griseus, alis maculâ humerali albidâ, remigibus maculis mediâ ferrugineâ subapicalique fusco-nigrâ fasciatis; subtus pallidior, abdomine strigis albidis fusco-marginatis lineato.

\* I take this opportunity of correcting an error in the 14th volume of these Transactions (p. 459.), where I stated that the tail-feathers of the birds of this genus were rigid, like those of the true *Certhia*. They are soft and pliant, as in the generality of birds.—V.

Certhia

Certhia picumnus. Ill. E'chelet picumne. Temm. Pl. Col. 281. f. 1.

Mr. Caley informs us that "this bird is met with in the scrubs at Paramatta, and may be seen running swiftly up the bodies of trees, crying out *pink*, *pink*, like the *Fringilla calebs* of Europe. Its *irides* are dark hazel-brown."

2. SCANDENS. C. fusco-brunneus; remigibus fuscis, maculis mediâ ferrugineâ subapicalique fusco-nigrâ fasciatis; gutture pectoreque albis, illo maculâ ferrugineâ postauriculari; abdomine nigro, albo-strigato; rectricibus griseis, in medio nigro-fasciatis.

Fœm. Gutture albo, immaculato.Climacteris scandens. Temm.E'chelet grimpeur. Id. Pl. Col. 281. f. 2.

The two specimens in the collection were shot together by Mr. Caley, running up a *tea-tree*. Their *irides* were light hazelbrown. M. Temminck informs us that the female is without the ferruginous spot behind the ears.

Genus. SITTA. Linn. et Auct.

1. CHRYSOPTERA. S. cinereu, subtus albida; alis caudâque nigro-fuscis, remigibus aurantio-ferrugineo in medio fasciatis, tectricibus inferioribus maculâ albâ notatis, uropygio rectricumque apicibus albis.

Sitta chrysoptera. Lath. Ind. Orn. Supp. p. xxxii. no. 1.

Orange-winged Nuthatch. Id. Gen. Hist. iv. p. 77. no. 20. pl. 63.

This species of *Nuthatch*, Mr. Caley informs us, is not unfrequent among the small trees about Paramatta. The *irides* are cream-coloured.

The

The species of the Linnean group of Sitta, although few in number, appear to be found in all parts of the globe. They exhibit little differences among themselves in general characters. Our New Holland species perhaps deviates from the type of the genus, if we consider the S. Europæa of Linnæus to hold that rank, more than any other species of the group. Its bill is more slender, and its wings more acuminated. The second quillfeather is nearly as long as the third, fourth, and fifth, which are almost equal, and it is longer than the sixth; whereas in the European species the same feather is much shorter than the third, and also falls short of the sixth. The Javanese species. S. frontalis, Horsf., approaches our bird most nearly in respect to these characters of the bill and wings. While the North American bird, S. Carolinensis, Briss., has nearly the same formation of wing as our species, but has the stronger and more lengthened bill of the European bird.

## Fam. CUCULIDÆ.

## Genus. CUCULUS. Linn. et Auct.

- \* Alis acuminatis, caudâ longiori, tarsis brevibus plumis tibiarum tectis.
- 1. INORNATUS. C. cinereus, subtus pallidior, rectricibus fasciis albis utrinque denticulatis.
- Fœm.? Saturatiori-cinerea; nuchâ, torqueque pectorali interrupto fusco ferrugineo-luteo variegatis; tectricibus albo et ferrugineo-luteo parcè notatis.
- Alæ maculâ longitudinali humerali notatæ. Remiges fasciis albis, usque ad tertiam partem longitudinis suæ, internè marginatæ. Tectrices inferiores albidæ. Rectrices utrinque maculis albis denticulatæ. Rostrum nigrum, basi pallidum. Pedes pallidi. Longitudo corporis, 12<sup>1</sup>/<sub>5</sub>; alæ a carpo VOL. XV. 2 Q ad

ad remigem tertiam, 8; caudæ,  $6\frac{1}{2}$ ; rostri ad frontem,  $\frac{4}{5}$ , ad rictum,  $1\frac{3}{20}$ ; tarsi,  $\frac{3}{4}$ .

Mr. Caley marks the two birds described above as male and female of the same species, and we have accordingly given them as such. "The earliest period of the year," he remarks in his Notes, "at which I have met with this species at Paramatta, was September 6th, 1803. I have missed it in January. It may be frequently heard and seen on the tops of dead trees on the skirts of the woods, and such as have been left standing on the cleared ground."

2. ALBO-STRIGATUS. C. brunnescenti-cinereus, albo-strigatus, remigibus rectricibusque utrinque albo-deuticulatis.

- Frons gulaque pallide brunnescentes. Capitis, dorsi, scapularumque plumæ basi pallide cineraceæ, apice marginibusque albæ, in medio fusco-brunneæ. Tectrices superiores apice albo, maculâ longitudinali humerali notatæ; inferiores albidæ. Remiges, primâ exceptâ, pogonio externo maculis albidis marginatæ; omnes, pogonio interno fasciis albidis denticulatæ, apicibusque albo-marginatæ. Rectrices utrinque fasciis albis denticulatæ, fasciis internis grandioribus. Rostrum pedesque flavi. Longitudo corporis,  $11\frac{7}{10}$ ; alæ a carpo ad remigem tertiam,  $7\frac{3}{10}$ ; caudæ,  $6\frac{1}{10}$ ; rostri ad frontem,  $\frac{3}{5}$ , ad rictum,  $1\frac{1}{10}$ ; tarsi,  $\frac{13}{20}$ .
- 3. CINERACEUS. C. capite dorso gulâque cineraceis, corpore subtus tectricibusque inferioribus ferrugineis, rectricibus fusconigris utrinque albo-denticulatis.

Fæm. abdomine transversim fusco-undulato.

Alæ maculâ longitudinali humerali albâ. Remiges brunnnescenti-cineraceæ; pogoniis internis maculâ albâ in medio notatis, fasciam albam, remigibus clausis, subtus exhibentibus.

tibus. Tectrices inferiores ferrugineæ. Rectrices cineraceonigræ, apicibus albo-maculatæ; duæ externæ albo-fasciatæ; cæteræ utrinque marginibus albo-denticulatæ; tertia maculis tribus albis, quarta maculâ unicâ albâ in medio notatæ. Rostrum nigrum; mandibulâ inferiore basi pallidâ. Pedes flavi. Longitudo corporis,  $10\frac{3}{10}$ ; alæ a carpo ad remigem tertiam,  $5\frac{2}{5}$ ; caudæ,  $5\frac{1}{5}$ ; rostri ad frontem,  $\frac{3}{5}$ , ad rictum,  $\frac{9}{10}$ ; tarsi,  $\frac{9}{20}$ .

Barred-tailed Cuckoo? Lath. Gen. Hist. iii. p. 310. no. 65.

- 4. INCERTUS. C. brunnescenti-cineraceus, subtus ferrugineoalbido fasciatus; tectricibus inferioribus albidis fusco-fasciatis; rectricibus maculis ferrugineis utrinque margine denticulatis.
- Gula gutturque fuscæ, albido-maculatæ. Pectus ferrugineoalbido fasciatum. Abdomen albido-fasciatum. Alæ maculâ humerali longitudinali albâ notatæ. Remigum pogonia interna maculâ sordido-albâ in medio notata, fasciam sordido-albam, alis clausis, subtus efformantia. Tectrices inferiores albidæ, fusco-fasciatæ. Rectrices ferrugineo, dentium more, ad margines maculatæ; externæ pogonio interno fasciâ albâ denticulato. Pedes fusco-flavi. Longitudo corporis,  $9\frac{1}{2}$ ; alæ a carpo ad remigem tertiam,  $5\frac{3}{10}$ ; caudæ,  $5\frac{1}{5}$ ; rostri ad frontem,  $\frac{3}{6}$ , ad rictum, 1; tarsi,  $\frac{3}{5}$ .

Mr. Caley in his Notes seems to consider this bird as the young of the last species. It differs much in the ground-colour of the upper parts, and in the *fasciæ* of the lower; while the spots on the tail are ferruginous instead of being white. These however are differences which may be easily supposed to take place in the different stages of growth: our own *Cuckoo* differs nearly as much in its early and adult ages. But there is one character in which the two birds before us differ, and which is 2 Q 2 seldom

seldom found to vary at different times in the same species; that is, the colour of the under wing-coverts. These are ferruginous in *C. cineraceus*, and white fasciated with fuscous in the bird now before us. We are therefore inclined to keep the birds separate, until future observation in their own country determine the point; expressing at the same time Mr. Caley's and our own doubts on the subject.

\* Alis rotundatis, caudâ breviori, tarsis magis nudis elongatisque.

- 5. VARIOLOSUS. C. fusco-cineraceus pallido-ferrugineo variegatus, subtus albescens fusco-variegatus; rectricibus pallidoferrugineo utrinque deuticulatis, apice albo.
- Caput fusco-cineraceo et pallido-ferrugineo strigatum. Dorsum tectricesque pallido-ferrugineo maculatæ. Scapulares eodem colore fasciatæ. Remiges fusco-cineraceæ, tæniâ gracili pallido-ferrugineâ prope apicem marginatæ; pogoniis internis in medio albo-maculatis, maculis, 'remigibus clausis, fasciam albam subtus efformantibus. Corpus subtus albidum: gula gutturque pallido-ferrugineo fuscoque variegatæ; pectus abdomen femorumque tectrices fusco-fasciatæ. Rectrices externæ pallido-ferrugineo fasciatæ, fasciis apicalibus in album vergentibus; cæteræ maculis pallido-ferrugineis utrinque denticulatæ. Rostrum pedesque pallidè flavi. Longitudo corporis, 7; alæ a carpo ad remigem tertiam,  $4\frac{3}{6}$ ; caudæ,  $3\frac{4}{8}$ ; rostri ad frontem,  $\frac{1}{2}$ , ad rictum,  $\frac{7}{10}$ ; tarsi,  $\frac{3}{5}$ .

The specimen now described has much the appearance of a young bird; and we find that Mr. Caley in his Notes seems to think it belongs to our two last species, which we have already stated that he fancied were the same. Upon inquiring, however, further

further from that gentleman, we find that his suspicions were founded merely on the circumstance of his having met with all these birds in the same place and at the same period. Although we have some doubt respecting our C. incertus being a distinct species, we have little respecting the present bird, which seems to belong to a different section of the genus from that in which the preceding species are included. The wings are shorter and more rounded, the tail also shorter and less graduated, and the tarsi are more naked and more elevated. There are six or seven species of Cuculus belonging to Australia and Africa, which form part of the same section of the group, and which differ from the bird before us only in their colours being bright and metallic. It is the want of these colours chiefly that causes us to consider the specimen before us as a young bird. In its general structure it has the characters of the birds to which we allude, and which in their young state are also without the shining tints of the adult birds, although perhaps not so decidedly so as our present species.

Mr. Caley informs us that he met with the three last-described species in the neighbourhood of Paramatta. They frequented the green wattle-trees which were of low growth. They made their appearance on the approach of winter; and it was Mr. Caley's opinion that they migrated southerly at the commencement of spring.

6. LUCIDUS. C. cupreo-viridi nitescens, subtus albidus cupreoviridi fasciatus, abdomine medio albo; rectricibus externis maculis albis quatuor utrinque notatis.

Fœm.? virescenti-fusca, subtus albida irregulariter fusco-fasciata. Cuculus lucidus. Gmel. Syst. i. p. 421. no. 47. Shining Cuckow. Lath. Gen. Hist. iii. p. 299. no. 49. pl. 56. Coucou éclatant. Temm. Pl. Col. 102. f. 1.

Mr.

Mr. Caley met with these birds but sparingly, and after the interval of some years. He conjectured that the period of their migration into the colony was not regular, or that few arrived. The species was first discovered in New Zealand, whence they probably migrate into the adjoining continent.

- 7. METALLICUS. C. suprà viridi-cupreus, subtus albus viridibrunneo fasciatus; rectricibus externis maculis albis quinque utrinque notatis.
- Caput genæque saturatiores. Gula, corpus subtus, tectricesque inferiores albæ, viridi-brunneo fasciatæ. Remigum, tribus primis exceptis, pogonia interna in medio albo-notata, fasciam albam obliquam, alis clausis, subtus exhibentia. Rectrices externæ maculis quinque albis, ferrugineo parcè variegatis, utrinque notatæ: secundarum pogonia interna fasciis alternis fusco-nigris ferrugineisque instructæ; cæteræ, mediis exceptis, leviter eodem more notatæ; mediæ fasciå fuscâ vix conspicuâ prope apicem notatæ. Rostrum pedesque nigri. Longitudo corporis,  $6\frac{3}{10}$ ; alæ a carpo ad remigem tertiam,  $3\frac{9}{10}$ ; caudæ,  $2\frac{19}{20}$ ; rostri ad frontem,  $\frac{3}{5}$ , ad rictum,  $\frac{4}{5}$ ; tarsi,  $\frac{13}{20}$ .

The chief difference between this bird and the preceding species lies in the colours of the upper parts inclining more to a metallic red than to green, in the head and adjacent parts being more saturated, and the *fasciæ* on the *abdomen* being less brilliant; while the marks of the tail-feathers also are distinct. In *C. lucidus* the outer feathers have four white spots on each barb, while in the present species they have five white spots marked with ferruginous. The other tail-feathers of the latter bird are also alternately fasciated with fuscous and ferruginous, while those of *C. lucidus* are free from spots, except a single fuscous

fuscous band near the *apex*. We have met with many specimens of *C. lucidus*, all of which accorded in these markings with the bird in our collection: but we have not seen any other specimen of the *C. metallicus* besides the bird before us. This bird differs also from *C. chalcites*, Ill., which has been described as a New Holland *Cuckoo*, in having the *abdomen* fasciated, which in both sexes of the other bird is pure white and free from markings\*.

## Genus. EUDYNAMYS<sup>†</sup>.

- Rostrum crassum, subelongatum, culmine rotundato, a basi arcuato, lateribus subcompressis: mandibulâ superiore apice subemarginatâ, inferiore gonyde ascendente conspicuâ: naribus subgrandibus, patulis, ovalibus, subobliquè positis, suprà membranâ partim tectis.
- Alæ subbreves, rotundatæ; remigibus tertiâ quartâ et quintâ ferè æqualibus longissimis, primâ brevi undecimæ æquali; pogoniis integris.
- Pedes robusti, nudi; acrotarsiis ad latus externum compressissimis, in scuta quatuor grandia divisis; paratarsiis in medio compressis, in scutula plurima divisis.

Cauda elongata, patula, rotundata.

The true *Cuckoos*, or that portion of the present family of *Cuculidæ* which constitutes the genus *Cuculus*, Auct., is distinguished from the remaining groups of the family by the comparative weakness of the bill, in which the *nares* are small and rounded, and situated on an elevated membrane; by the wings being strongly acuminated, the primary quill-feathers considerably exceeding the secondary in length; and by the feebleness of the legs and toes, the former of which are plumed beneath the knee, and are generally covered by the thigh-

\* See Temm. Pl. Col. 102. f. 2. + Ev bene, and Suvaus potentia.

feathers.

feathers. The group which we have just characterized deviates from these characters, which may be considered typical in the family, by the greater strength of all these members. The bill is powerful, the under mandible more particularly, which is marked by a strong ascending gonys. The nostrils are wide and oval, and covered only on the upper part by a membrane. The tarsi and feet are particularly strong: the former are much compressed on the external side, exhibiting by this conformation a nearly flattened surface in front. The wings also are much rounded, and comparatively shorter than in the typical Cuckoos. In many of these particulars the group agrees very nearly with the neighbouring genera Centropus, 111., and Phænicophaus, Vieill., which have equally been separated from the typical species of the family. But it may at once be distinguished from Centropus by the absence of the lengthened nail to the hallux; and it will be seen equally to differ from Phanicophaus in its stronger, shorter and less arcuated bill; in the wings being longer, and the tail rounded, not graduated. The compressed formation of the sides of the tarsi in our group is also wanting in Phanicophaus. The species of this genus seem very widely distributed over the East. The Cuculus punctatus, Linn., the Coucou tacheté des Indes Orientales (Pl. Enl. 771.), appears to be referable to this group.

1. ORIENTALIS. End. metallicè niger, rostro flavescente.

Cuculus orientalis. Linn. i. 168. no. 2.

Coucou des Indes Orientales. Pl. Enl. 274. f. 1.

Eastern black Cuckoo. Lath. Gen. Hist. iii. p. 282. no. 26.

Fœm. suprà nitidè virescenti-fusca albo-maculata, rectricibus albofasciatis; subtus albida, virescenti-fusco transversim undulata.

Cuculus Mindanensis. Linn. i. 169. no. 3.

Concou

Coucou tacheté de Mindanao. Pl. Enl. 277. Mindanao Cuckoo. Lath. Gen. Hist. iii. p. 283. no. 27.

These birds, which now generally are considered the sexes of one species, appear to be but accidental visitors in the colony. At least Mr. Caley informs us that he never met with more than two individuals of the male and one of the female. The male specimen in the Society's collection seems to be a young bird changing to the adult plumage. It has several pale ferruginous feathers on the lower parts of the body, and it has a single ferruginous feather striated with black among the secondary quillfeathers of the right wing, which forms a striking contrast with the deep black of the rest. The corresponding feather on the left wing was lost, as Mr. Caley tells us, by the shot striking the wing. This bird had berries of *Cassytha* in its stomach. The native name of the male is *Cowhat*'; of the female, *Bellinging*.

- 2. FLINDERSII. Lath. MSS. Eud. suprà brunnescenti-fusco nitescens ferrugineo-luteo variegatus, capite ferrugineo-luteo, sincipite strigâque pone subtusque oculos nigro-nitescentibus; subtus ferrugineo-luteus, fasciis gracilibus fuscis undulatus.
- Caput ferrugineo-luteum; sincipite, strigâ postoculari ad scapulares descendente, strigâque suboculari gulam utrinque marginante nigro-nitescentibus. Dorsum, scapularesque nitidè brunnescenti-fuscæ, ferrugineo-luteo parcè punctatæ fasciatæque. Tectrices fasciis latis ferrugineo-luteis notatæ. Remiges utrinque ferrugineo-luteo fasciatæ, fasciis internis apice albidis. Rectrices lunulis ferrugineo-luteis fasciatæ. Gula, pectus, abdomen, femorum tectrices, uropygiumque ferrugineo-luteæ, fasciis gracilibus parcè undulatæ. Rostrum, pedesque fusci, illo apice pallido. Longitudo corpovol. Xv. 2 R

ris, 16; alæ a carpo ad remigem tertiam,  $8\frac{1}{2}$ ; caudæ,  $8\frac{1}{2}$ ; rostri ad frontem,  $\frac{4}{5}$ , ad rictum,  $1\frac{3}{10}$ ; tarsi,  $1\frac{1}{5}$ . Flinders's Cuckoo. Lath. Gen. Hist. iii. p. 308. no. 63.

#### Genus. CENTROPUS. Ill.

1. PHASIANUS. Cent. rufo flavo nigroque variegatus: capite, collo, gulâ, jugulo, pectore, abdomineque nigris; caudâ nigrâ supru fasciis albidis interruptis punctatâ.

Cuculus phasianus. Lath. Ind. Orn. Supp. p. xxx. no. 4. Polophilus phasianus. Leach, Zool. Misc. pl. xlv. Pheasant Coucal. Lath. Gen. Hist. iii. p. 240. no. 2.

 VARIEGATUS. Cent. rufo flavo nigroque variegatus; dorso posticè nigro; caudà nigrà suprà transversim variegato-fasciatà.
 Polophilus variegatus. Leach, Zool. Misc. tab. li.
 Variegated Coucal. Lath. Gen. Hist. iii. p. 250. no. 15.

Fam. RAMPHASTIDÆ.

Genus. SCYTHROPS. Lath.

1. NOVÆ HOLLANDIÆ. Scyth. suprà plumbeo-cinereus, capite collo corporeque subtus pallidè griseis; caudà fascià latà nigrà subapicali, apice albo.

Scythrops Novæ Hollandiæ. Lath. Ind. Orn. p. 141. Psittaceous Hornbill. Phillips, Bot. Bay, pl. in p. 165. Anomalous Hornbill. White's Journ. pl. in p. 142. Scythrops présageur. Temm. Pl. Col. 290. Australasian Channel-Bill. Lath. Gen. Hist. ii. p. 300. pl. 32.

The native name of this bird is *Curriay'gun*. The specimen in the Society's collection was shot by Mr. Caley in the woods at a short distance from Paramatta. He was directed to it by a native who discovered the bird, of which Mr. Caley was long in search, by its loud screaming noise. The same native informed him

him that the bird was only seen in summer, that he knew nothing of its nest, but that it fed upon figs at the Flats. These birds had also been pointed out by the natives to Mr. Caley in their flight; at which time he observed them very high in the air, and wheeling about with great swiftness. That gentleman adds, that the present individual had two large caterpillars and some of the gold beetles (Anoplognathus viridi-æneus, &c., Leach) in its stomach at the time he shot it. Seeds of the red gum and peppermint trees have also, as we are informed\*, been found in the crops of these birds. Like the South American genera Ramphastos and Pteroglossus, which in conjunction with the present group compose the family of Ramphastidæ, they may probably be considered to be omnivorous.

# Tribus. TENUIROSTRES. Cuv.

Fam. MELIPHAGIDÆ.

The chief groups which compose the tenuirostral Tribe of the Insessores, or that assemblage of birds which derive their main nourishment from the suctorial powers of their tongue, are distinguished not only by their geographical distribution, but by striking peculiarities which point out their greater or less accordance with the typical characters of the Tribe. The most prominent indication of typical pre-eminence among them is exhibited in the superior developement of those organs or powers which contribute to the purposes of feeding by suction on the wing, and the consequent deficiency of those members which are suited for functions of a different nature. And in determining the different stations of the various groups of the Tribe, we are thus guided to the central or typical assemblage by detecting the superior powers of flight exhibited in the wings and tail, and the accompanying weakness of the bill and legs.

<sup>\*</sup> See Latham's Gen. Hist. ii. p. 301.

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In these characteristic peculiarities of the *Tenuirostral Birds*, the *Trochilidæ* or *Humming-Birds* of America display the greatest perfection. In them the wing is long, strongly acuminated, and formed for a rapid and constant flight. The tail also exhibits all the varieties of structure which we are accustomed to observe in those birds whose habits are aërial. On the other hand, the bill is feeble, and apparently of service only in forming a sheath to defend the tongue. The legs also are diminutive, and peculiarly weak, apparently of little use but to assist the bird in supporting itself when at rest; while the characteristic delicacy of those members conspicuously unfolds itself by the downy plumage descending from the thighs, with which covering nature seems to have provided them as a means of warmth and defence.

The nearest approach to the Humming-Birds is found in the Cinnyridæ of the Old World. A line of distinction, however, is drawn between the two families by the comparatively greater strength of conformation in both the bill and legs of the latter group. The wings also, although still formed for a suspended flight, lose the strongly-marked length and acumination of those of the Trochilus: they are more rounded, and the first quillfeather is short, almost indeed spurious. We do not observe, moreover, that varied form of the tail which adds apparently so much to the purposes of flight among birds : in some species, indeed, the middle tail-feathers are elongated beyond the lateral, but hitherto we have seen no approach to the forked con-These two families however, although they may formation. thus be distinguished from each other, may yet be united together as forming the Normal Group of the Tribe. In comparison with the remaining families which form the Aberrant subdivision of it and lead off to other neighbouring Tribes, they possess a generally weaker conformation; and their mode of taking their their food, unlike that of the other families, is represented as being exclusively on the wing. By the brilliancy again, and varying lustre of their colours, these "gay creatures of the element" evince their separation from the neighbouring groups, and indeed from every other race of birds, of which the manners are less aërial than their own, and the food less sublimated than the nectar of flowers.

In the New World again, a third group appears, the family of Nectariniad $\alpha$ , in which a comparative strength of bill and legs is exhibited, nearly equal to that which is found in many of the more typical species of the Insessores. The wings are generally shorter than those of the Cinnyrida, and differ in their structure also from them, the first quill-feather being long, almost equalling the second in length, while that of the Old World family is short, and, as before observed, nearly spurious. The tail in all the species we have met with is even. These birds, distinguished by their stronger conformation from those of the Normal Group, are distinguished also by their habits. They do not feed exclusively on the wing, but explore the nectaries of flowers as they hop from branch to branch\*. By their colours also they may be set apart from the typical families. These, although in most species bright and vivid, are decided colours, and not changeable in different lights.

In addition to these groups Australia furnishes another important accession to the *Tenuirostres*. No species of the beforementioned groups has hitherto been found in that country; and their place seems to be occupied by a group of considerable extent, which preserve the same habits of feeding on vegetable juices, but deviate from the typical character of the Tribe even still further than the *Nectariniadæ*. In the birds to which I allude, or the family of *Meliphagidæ*, the wings and tail show an evident deficiency in the powers of flight, compared with

<sup>\*</sup> See these Transactions, vol. xiv. p. 464.

the Trochilida. The former members are short and rounded. the four first quill-feathers gradually exceeding each other in length, and those which succeed by degrees decreasing. The tail also in the typical species of the family is long and graduated. On the other hand, the tarsi and feet are endowed with much strength, and the powers of the hind-toe in particular are conspicuously developed. We have already observed the great deficiency of true climbing birds which prevails in New Holland; and this peculiarity of the strong scansorial hallux may enable the Meliphagidæ in some measure to supply that deficiency. The prevalence also of this character, which they hold in common with the neighbouring family of Certhiadæ, with which they are also united by the character of the extensile tongue, points out the continuance of the chain of affinities which connects the neighbouring Tribes of Scansores and Tenuirostres together; and adds another to the numberless instances of the harmonious disposition of nature.

Besides the characters which thus indicate that the Meliphagida are placed at the extremity of the Tribe of Tenuirostres, there are one or two particulars which separate them from the more typical Honey-feeding groups. Their tongue is divided at the apex into several filaments; while that of the Trochilidæ is bifid only at the end. We have not at present sufficient data to determine the general character of the tongues of the other Tenuirostral families, and shall therefore make no comparison with them on a point on which we could speak only partially. One more character must be observed as peculiar to our New Holland group. The nares, which in all the other families of the tribe are situated at the base, and are more or less rounded, are here longitudinal and linear, forming a lengthened slit extending in some instances nearly to half the length of the bill, and partially closed above by a longitudinal membrane. This character prevails so far in the family as to be almost the only external

external mark of distinction which separates some of the more slender-billed species from the conterminous species of the *Cinnyridæ*.

In addition to the numerous species of this family which decidedly exhibit most of its typical characters, and which in their general slenderness of form coincide with the other groups of the Tenuirostres, there are many species, in which great size and strength of form is discernible, which have been ranked as Meliphagous in consequence of the alleged filamentous conformation of their tongue. Many of these, from their external characters, might be referred at once to the powerfully constructed groups of Corvidæ and Merulidæ. Of some of these species we can say with confidence that they are Meliphagous, from our having examined the tongue. But we have much doubt as to a similar construction of tongue existing in all the species. We consider it, however, the most eligible plan to enumerate all these species at the end of the present family; stating our doubts on the subject, and leaving the question to be decided by those naturalists who may have the opportunity of inspecting the birds in their native haunts.

## Genus. MELIPHAGA\*. Lewin et Auct.

\* Cauda rotundata, rostro longiori subgraciliori.

## 1. NOVE HOLLANDIE. Mel. nigra, subtus alba nigro-striata; superciliis maculâque aurium albis, remigibus in medio externè flavo-

\* The species of the family of *Meliphagida* appear very numerous, and every arrival from New Holland and the Australian islands brings an addition to their number. At the same time the species themselves are but ill-defined; and in the present imperfect state of our knowledge, and while information is daily increasing, we consider it unadviseable to attempt more than a rude sketch of this interesting family. The group which we have selected above as representing the *Meliphaga* of Lewin and Authors,

flavo-marginatis, rectricibus basi externè flavis, apice internè albo-maculatis.

Certhia Novæ Hollandiæ. Lath. Ind. Orn. p. 296. no. 49. New Holland Creeper. White's Journ. pl. in p. 186. 3. 297. 2.

Lath. Gen. Hist. iv. p. 171. no. 17. Heorotaire tacheté. Vieill. Ois. dor. ii. p. 91. pl. 57.

Mr. Caley thus observes on this species.—" This bird is most frequently met with in the trees growing in scrubs, where the different species of *Banksia* are found, the flowers of which I have reason to think afford it a sustenance during winter. In the summer I have shot it when sucking the flowers of *Leptospermum flavescens*. In the scrubs about Paramatta it is very common."

M. Vieillot's Heorotaire noir (pl. 71.), which seems accurately

Authors, is the only assemblage of these birds of which we can speak with any satisfaction to ourselves. The species accord in their general characters; and in their habits and the structure of their tongue they are represented as agreeing most perfectly. They exhibit five prominent modifications of form, according to the variation chiefly of the characters of the bill and tail. At present we wish to consider these types of form as sections only of the group, which we name provisionally the genus *Meliphaga*. When the species become more known, the present sections may justly be considered genera, and the higher group may be denominated the subfamily *Meliphagina*. When this subdivision takes place, the section which stands first in our text may be considered the true *Meliphaga*. The *Mel. Novæ Hollandiæ* will form the type. It may thus be characterized.

#### Genus. MELIPHAGA. Lewin et Auct.

Rostrum subgracile, subelongatum; culmine arcuato, ad basin subcultrato; naribus longitudinalibus, linearibus, perangustis, membranâ suprà tectis, rostri medium longitudine superantibus.

Lingua ad apicem setis plurimis instructa.

Alæ mediocres, subrotundatæ; remige primå brevi, secundå tertiå et quartå quæ est longissima gradatim longioribus; tertiå et quintå, secundå et sextå æqualibus: tertiæ ad septimam inclusam pogoniis externis in medio latioribus.

Caudu subelongata, rotundata.

Pedes subfortes; halluce subclongato, forti; acrotarsiis scutellatis.

to

to agree with the female of this species figured in White's Journal. is considered by that gentleman as a distinct species. This is a point which can only be decided on the spot; and Mr. White's observations must have great weight until they are proved to be incorrect. We mention the circumstance, in order that those voyagers, who may have opportunities of making observations on the subject, may pay attention to it. We suspect that the investigation may lead to the discovery of many distinct species in the group, in which a great similarity of colouring seems to prevail.

2. AUSTRALASIANA. Mel. nigricans; strigå superciliari, abdomine, gulâque albis, hâc graciliter fusco-striatâ ; remigum rectricumque pogoniis externis in medio flavis. Certhia Australasiana. Shaw, Gen. Zool. viii. p. 226. L'Heorotaire noir et blanc? Vieill. Ois. dor. ii. p. 89. pl. 55.

This seems a very distinct species. We do not feel quite certain that it accords with M. Vieillot's bird, although his figure is referred to by Dr. Shaw.

3. MELANOPS. Mel. fusca; fronte, abdomineque albis; fascià suboculari ad latera pectoris extendente utrinque nigrâ. Certhia melanops. Lath. Ind. Orn. Supp. p. xxxvi. no. 4. Heorotaire mellivore. Vieill. Ois. dor. ii. p. 124. pl. 86. White-fronted Honey-Eater. Lath. Gen. Hist. iv. p. 173. no. 20.

This bird was caught on board ship by Mr. Brown, off the South coast of New Holland, February 5th, 1802.

\*\* Caudà rotundatà, rostro subbreviori, subfortiori.

4. AURICOMIS. Mel. olivacco-viridis; vertice, corpore subtus, maculâque paroticâ flavis; strigâ per oculos nigrâ. VOL. XV.

Muscicapa

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Muscicapa auricomis. Lath. Ind. Orn. Supp. p. xlix. no. 1. Heorotaire à oreilles jaunes. Vieill. Ois. dor. ii. p. 123. pl. 85. Tufted-eared Honey-Eater. Lath. Gen. Hist. iv. p. 197. no. 56.

Mr. Caley first observed this species in some high trees in the neighbourhood of Paramatta; but did not meet with it for many years afterwards. The birds however frequented the trees in the brush along the upper part of Duck River, in great abundance, although it was at a late period of his residence in the colony that he met with them at that place. He imagines that their coming to Paramatta when he first saw them was accidental.

5. CHRYSOTIS. Mel. suprà olivacco-viridis, subtus pallidior, capite grisescente, maculà auriculari ovali flavà, regione periophthalmicà nigrescente.

Meliphaga chrysotis. Lewin, Birds of New Holl. pl. 5. Certhia chrysotis. Lath. Ind. Orn. Supp. p. xxxviii. no. 16. Heorotaire gris? Vieill. Ois. dor. ii. p. 122. pl. 84. Yellow-eared Honey-Eater. Lath. Gen. Hist. iv. p. 195. no. 54.

We have some doubt as to this species being the same as that of M. Vieillot: the blackish marking round the eye in our species being wanting in the figure in the "Oiseaux dorés."

6. LEUCOTIS. Mel. corpore suprà abdomineque flavo-olivaceis; capite, gutture, pectoreque nigricanti-griseis; maculà auriculari albâ.

Turdus leucotis. Lath. Ind. Orn. Supp. p. xliv. no. 26. White-eared Honey-Eater. Id. Gen. Hist. iv. p. 186. no. 41.

One of the specimens of this species in the Society's collection was procured by Mr. Brown at Shoalwater Bay in 1802. The species, as well as the next, are noticed by Mr. Caley as being by no means uncommon: but he has made no remarks upon their manners.

\*\*\* Caudâ

\*\*\* Caudâ æquali, rostro breviori, fortiori\*.

7. CHRYSOPS. Mel. suprà olivaceo-fusca, subtus pallidior ; tæniå per oculos flavâ, suprà subtusque nigro-marginatâ.

Sylvia Chrysops. Lath. Ind. Orn. Supp. p. liv. no. 5. Black-cheeked Honey-Eater. Id. Gen. Hist. iv. p. 196. no. 55.

8. LUNULATA. Mel. viridi-olivacea, capite genisque nigris; lunulâ nuchali corporeque subtus albis, orbitis nudis rubris.

Certhia lunulata. Shaw, Gen. Zool. viii. p. 224. Le Fuscalbin. Vieill. Ois. dor. ii. p. 95. pl. 61. Red-eyed Honey-Eater. Lath. Gen. Hist. iv. p. 203. no. 65.

"This bird," Mr. Caley says, "is called *Golden-Eye* by the settlers. I shot it at Iron Cove, seven miles from Sydney, on the Paramatta road."—Specimens of the species now in the collection were brought by Mr. Brown from Port Jackson.

# 9. INDISTINCTA. Mel. suprà olivaceo-fusca, subtus sordidè albida, remigibus flavescentibus.

This bird, which was found by Mr. Brown at King George's Sound, on the South coast of New Holland, appears closely allied to the last. It is however in very bad condition, and scarcely admits of a description. The dimensions appear nearly the same as those of *Mel. lunulata*. It has much of the appearance of a young bird.

## 10. BREVIROSTRIS. Mel. brunnescenti-fusca, subtus albida, dorso virescenti, strigâ postoculari albâ, rostro subbrevi.

\* This section of our group corresponds with the genus *Melithreptus* of M. Vieillot; at least the *Mel. lunulata*, one of the best known species in the section, is given as one of the types of that genus. We do not know how far M. Vieillot meant to extend his group; but it may be adviseable hereafter to restrict it to those species which will arrange themselves in the present section.

2 s 2

Remiges

Remiges fuscæ, subtus pallidiores, basi internè albescentes. Tectrices inferiores fulvescenti-albidæ. Longitudo corporis,  $4\frac{17}{20}$ ; alæ a carpo ad remigem quartam,  $2\frac{17}{20}$ ; caudæ,  $2\frac{1}{5}$ ; rostri,  $\frac{9}{20}$ ; tarsi,  $\frac{3}{5}$ .

This bird is said to be common by Mr. Caley, and to be called *Cung'leer* by the natives.

\*\*\*\* Caudâ æquali, rostro breviori, graciliori\*.

11. CARDINALIS. Mel. nigra; capite, dorso medio, uropygio, gutture, pectore, abdominisque lateribus coccineis; tectricum marginibus, abdomine imo, crissoque albis.

Certhia Cardinalis. Gmel. i. p. 472. no. 38.

Certhia Australasia? Leach, Zool. Misc. i. pl. 11.

Le Souï-manga rouge et gris. Vieill. Ois. dor. ii. p. 58. pl. 36.

Cardinal Honey-Sucker. Lath. Gen. Hist. iv. p. 199. no. 59.

pl. 71. fig. 2.

Mr. Caley informs us that he did not himself meet many birds of this species, although he understood them to be plentiful: his not meeting them probably arose, as he says, from their being inhabitants of brushes. His researches were chiefly in

\* This section forms an interesting subdivision of the present group, as marking the passage to the *Cinnyrida*. When the species become more known, and the whole group becomes too numerous for remaining as a single genus, this type of form may be generically characterized as follows, the *Mel. cardinalis* being the normal species.

#### Genus. MYZOMELA.

Rostrum breve, gracile; culmine arcuato, ad basin subcultrato; naribus longitudinali-

bus, linearibus, perangustis, membranâ suprà tectis, rostri tertiam partem longitudine æquantibus.

Lingua, alæ, pedesque iidem ferè ut in Meliphagis veris. Cauda subbrevis, æqualis.

Several new species of *Honey-Eaters*, lately brought home to this country from the Sandwich Islands by Capt. Lord Byron, R.N., appear to accord with this group.

the

the forest scrubs, where his specimens were procured. The colonists call this bird *Little Soldier*.

This division of the group of *Meliphaga* is that to which we have alluded above as offering few external marks of distinction from many of the *Cinnyrida*, besides the form of the nostrils.

\*\*\*\*\* Caudâ æquali, rostro graciliori, longiori.

12. TENUIROSTRIS. Mel. suprà cinerea; abdomine crissoque ferrugineis; regione interhumerali, maculâque jugulari sub-lunulari brunneis; capite, pectoris lateribus, rectricibusque nigris; harum duarum externarum apicibus, gutture, juguloque albis.

Certhia tenuirostris. Lath. Ind. Orn. Supp. p. xxxvi. no. 5. Le Cap-noir. Vieill. Ois. dor. ii. p. 94. pl. 60.

Slender-billed Honey-Eater. Lath. Gen. Hist. iv. p. 194. no. 52. pl. 72.

Mr. Caley observes that he has seen this bird both at Sydney and at Paramatta.

13. FULVIFRONS. Mel. pallidè brunnescenti-fusca; tæniâ superciliari, gutture, pectore, abdomine medio, crissoque albis; fronte fulvo; strigâ per oculos, pectorisque lateribus brunneis. Var.? sincipite canescente.

Striga brunnea per oculos extendit regionem paroticam includens, et ad latera pectoris descendens, ubi fasciam lunularem brunneam interruptam ferè efformat. Interscapulium brunneo-fuscum, pallido-fusco parcè striatum. Remiges brunneo fuscæ externè albido graciliter marginatæ, pogoniis internis ad basin fulvo-marginatis: subtus pallidè fuscæ, fulvo, ut supernè, notatæ. Tectrices inferiores fulvæ. Rectrices brunneo-fuscæ, subtus pallidè fuscæ. Rostrum, pedesque nigri. Longitudo corporis,  $5\frac{17}{26}$ ; alæ a carpo ad remigem quartam, 3; caudæ,  $2\frac{4}{5}$ ; rostri,  $\frac{7}{10}$ ; tarsi,  $\frac{7}{10}$ .

One

One of the specimens of this species in the collection was brought by Mr. Brown from Port Jackson, where he met with it in August 1803. The species comes very near the first subdivision of this genus, having a stronger bill, and rather more elongated toes than the birds of the present section. The shape of its tail however, which is even, retains it in its present situation, but at that extreme of the section which joins the first subdivision, and completes the circular succession of the whole group.

This species bears some resemblance to M.Vieillot's *Heorotaire* brun (pl. 65.), the Certhia fusca, Gmel.; but it is differently marked on the throat and lower body; and as it belongs to a different locality it may be considered distinct.

## Genus. MYZANTHA\*.

- Rostrum forte, subbreve, subrectum, ad apicem compressum, culmine carinato, paululum arcuato; naribus linearibus, anticè ovalibus, membranâ suprà tectis, ad basin plumulis confertis opertis; mandibulà superiori leviter emarginatâ.
- Alæ mediocres, subrotundatæ: remige primå brevi, secundå duplò longiore, tertiå paulò breviore quartå et quintå, quæ sunt æquales longissimæque omnium.

Pedes mediocres; acrotarsiis scutellatis, paratarsiis integris. Cauda subelongata, subrotundata. Obs. Orbitæ nudæ.

This group approaches very nearly to the shorter- and strongerbilled birds of Meliphaga, such as M. auricomis, Lath.; but the bill is considerably stouter at the base and less arcuated. The nares also are not so linear, but become slightly oval towards the anterior part. The space round the eye is naked. We are assured that the tongue of the first species is bristly towards the

\* Muzaw sugo, and aveos flos.

point:

point: and indeed the general character of the group accords exactly with that of the *Meliphagidæ* in general.

1. GARRULA. Myz. grisea, fronte corporeque subtus albidis, nuchâ pectoreque leviter albo et cinereo fasciatis, pileo genisque nigris, strigâ longitudinali alarum flavâ, remigibus rectricibusque nigro-fuscis apicibus albis.

Merops garrulus. Lath. Ind. Orn. Supp. p. xxxiv. no. 9. Chattering Honey-Eater. Id. Gen. Hist. iv. p. 164. no. 9.

"The native name of this bird," observes Mr. Caley, "is *Cobay'gin;*—it is a very common bird, and may be seen at all times of the year. Its note is loud, and like a kind of laugh. I once killed six of these birds at a shot, when on the wing hovering over a part of a tree whence some substance had exuded; but they are not gregarious."

- 2. FLAVIROSTRIS. Myz. olivaceo-viridis, subtus flavescens; maculà utrinque anteoculari flavâ; fronte, plumulis capistralibus, tæniâque rictali saturatè brunneis; tectricibus alarum griseis.
- Remiges fuscæ, exteriores pallido-griseo, interiores flavo-viridi externè marginatæ; subtus cinereo-fuscæ. Tectrices inferiores cinereo-fuscæ, ad humeros flavescentes. Rectrices supernè olivaceo-virides, subtus flavescentes. Rostrum pedesque flavi. Longitudo corporis,  $8\frac{1}{2}$ ; alæ a carpo ad remigem quartam,  $3\frac{17}{20}$ ; caudæ,  $3\frac{7}{20}$ ; rostri ad frontem,  $\frac{11}{20}$ , ad rictum,  $\frac{7}{10}$ ; tarsi, 1.

Mr. Caley thus observes on this bird.—" Dell-bird or Bellbird. So called by the colonists. It is an inhabitant of brushes, where its disagreeable noise (disagreeable at least to me) may be continually heard; but no where more so than on going up the harbour to Paramatta, when a little above the Flats."

Genus.

## Genus. ANTHOCHÆRA\*.

Rostrum elongatum, subattenuatum, subarcuatum; culmine ad basin subcarinato; mandibulá superiori vix emarginatà; naribus longitudinalibus, linearibus, membranâ suprà tectis, ad medium rostrum extendentibus ibique apertioribus.

Lingua ad apicem in setas plurimas divisa.

Alæ mediocres, rotundatæ; remige primå brevi secundå tertiå parte longiori, tertiå gradatim longiori, quartå quintå et sextå æqualibus longissimis; tertiæ ad septimam inclusam pogoniis externis in medio gradatim latioribus.

Cauda elongata, rotundata, vix gradata.

Pedes fortes, longitudine mediocres; acrotarsiis scutellatis, paratarsiis integris.

The strong, but at the same time lengthened and attenuated bill of this group, added to the size and powerful conformation of the species, distinguish it from the true Meliphaga. The lengthened and subgraduated tail also serves as a strong mark of distinction. The chief external characters of the group associate it with the Meliphagida, although upon a decidedly enlarged scale: and the tongue of one of the species, now before us, exhibits the filamentous formation peculiar to the Australian Honey-Eaters. The genus is closely allied to the last; the same general character pervades them: but the bill of the present genus is longer and slenderer, and the tail lengthened and somewhat graduated instead of being even, as in Myzantha. There is a general similarity of colours throughout the group, which has led, as we suspect, to several species being confounded together under one denomination.

M. Vieillot has referred this bird to a new genus of his, which he names *Creadion*, and which he divides into two sections; one

\* Avos flos, and xaipa gaudeo.

represented

represented by the Sturnus carunculatus, Gmel., the other by the bird before us. He places this genus in the vicinity of the Starnidæ; uniting it with one or two other forms, which are chiefly distinguished by fleshy processes from their heads, into a family under the name of Carunculati. As we consider our present group to have no relation to the Sturnidæ beyond the unimportant analogical one of having in common with two or three species carunculated appendages to the head, we have no hesitation in removing it from the genus Creadion; leaving the Sturnus carunculatus (with which species however we must confess that we are unacquainted) to represent that group.

1. CARUNCULATA. Anth. dorso fusco-griseo albo-striato, capite corporeque subtus albidis fusco-striatis; abdomine medio flavescente; remigibus rectricibusque fusco-nigris, apicibus albis, illis in medio internè pallidè castaneis; lateribus colli carunculà cylindriceà instructis.

Merops carunculatus. Lath. Ind. Orn. p. 276. no. 20.
Corvus paradoxus. Id. Ib. Supp. p. xxvi. no. 10.
Pie à pendeloques. Daud. Traité d'Orn. ii. p. 246. pl. 16. no. xxx.
Wattled Bee-Eater. Phill. Bot. Bay, pl. in p. 164. White's Journ. pl. in p. 144. 8. 145. 2.

Wattled Honey-Eater. Lath. Gen. Hist. iv. p. 158. no. 3.

"All my specimens of this bird," says Mr. Caley, "were shot in Van Diemen's Land. I have met with it at Western Port in the trees close to the sea-side. To my knowledge it never occurred about Sydney, although it is said by Mr. White to be an inhabitant of the colony."

 MELLIVORA. Anth. fusco nigra supernè subvirescens, albo striata lunulataque; remigum rectricumque apicibus albis, istarum pogoniis internis in medio lætè castaneis.
 VOL. XV. 2 T Corthin

Certhia

Certhia mellivora. Lath. Ind. Orn. Supp. p. xxxvii. no. 8. Le Goruck? Vieill. Ois. dor. ii. p. 126. pl. 88. Mellivorous Honey-Eater. Lath. Gen. Hist. iv. p. 161. no. 5.

Mr. Caley informs us that he called "this bird *Cookaycock*, from its uttering a sound like that word. 'I he natives call it *Coke'ran*. It now and then may be seen in the scrubs about Paramatta, always on trees; but it is common in the neighbourhood of Sydney. It is what I should call an inhabitant of the coast. I have met with it at Western Port."

3. PHRYGIA.\* Anth. nigra, supernè flavo, infrà albo variegata; crisso albo; remigibus rectricibusque, harum duabus mediis exceptis, externè flavis.

Meliphaga Phrygia. Lewin, Birds of New Holl. pl. 3.

Merops Phrygius. Lath. Ind. Orn. Supp. p. xxxiv. no. 7. Shaw, New Holl. Birds, p. 13. pl. 4.

Le Merle ecaillé. Le Vaill. Ois. d'Afr. iii. pl. 116.

Black-and-yellow Honey-Eater. Lath. Gen. Hist. iv. p. 165. no. 10.

#### Genus.

\* We take this opportunity of characterizing the following bird, which has been generally considered the young of *Anth. carunculata*, but which appears to us to be distinct. Besides some strong marks of difference in the colours of the two birds, which appear too decided to indicate the difference merely of age, the shape of the caruncle affords a strong ground for separation. In our bird this appendage to the cheeks is short, flat, compressed, and suboval. In *Anth. carunculata* it is long, narrow and cylindric. The difference between the two birds is much too great to allow us to refer them to one species, without authentic proof of their identity. Our bird resembles the description of *Merops chrysopterus*, Lath.; but that bird is said to have no caruncle on the cheeks, and to have the markings on the wings of a golden-orange colour.

4. LEWINII. Anth. suprà fusco-grisea albido-striata, capite nigrescente albido striatim lineato; subtus pallidior, abdomine flavescente; remigibus rectricibusque fuscis

## Genus. TROPIDORHYNCHUS\*.

Rostrum forte, subelongatum, culmine elevato, maximè cultrato, arcuato; mandibulà superiori ad apicem vix emarginatà; naribus prope medium sitis, subovalibus, apertis, perviis.

Alæ longitudine mediocres, subrotundatæ; remige primå brevi, secundå tertiå parte longiori, tertiå quartå et quintå æqualibus longissimis, sextå his paulo breviori.

Cauda subelongata, æqualis.

Pedes fortes, longitudine mediocres; acrotarsiis scutellatis, paratarsiis integris.

Caput plus minusve nudum.

The strong bill, with its elevated keel, and the nostrils oval, pervious, and situated near the middle of the beak, offers a very distinguishing character by which this group is known from the more typical *Meliphagidæ*. We know not upon what authority they are said to be *Honey-Eaters*; but the above-mentioned form and situation of the *nares* are so different from what is

fuscis ad apices albis, istis in medio interne pallide castaneis; lateribus colli caruncula brevi subovali compressa instructis.

Genarum plumulæ a rictu sub oculos extendentes albæ, sericeæ, breves. Tectricum remigumque plumæ albido marginatæ, harum pogoniis internis in medio castaneomarginatis, fasciam castaneam, alis clausis, subtus exhibentibus. Rostrum mgrum. Pedes flavescentes. Longitudo corporis, 11; alæ a carpo ad remigem quartam,  $6\frac{1}{5}$ ; caudæ,  $6\frac{7}{10}$ ; rostri ad rictum,  $1\frac{5}{10}$ , ad frontem, 1; tarsi,  $1\frac{5}{10}$ .

In Museo Societatis Zoologicæ.

Memoriæ Domini JOANNIS GULIELMI LEWIN, peregrinatoris in Australiå seduli sagacissimique, qui Meliphagidarum characteres primùm detexit et illustravit, hac avis sit sacra.

The Poe Honey-Eater of Dr. Latham, Merops Novæ Zealandiæ, Gunel. (M. concinnatus, Lath.) may be referred to this group, of which it has the bill and the general characters. In its tail only it differs, which is slightly rounded at the apex.

\* Tponis carina, and puyyos rostrum.

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usually

usually the character of those birds, that we have much doubt as to the actual situation of our group.

1. CORNICULATUS. Trop. brunnescenti-griseus, subtus albidus; capite, collo superiori, gutturisque torque angusto atris, nudis; mento, pectore, rectricumque apicibus albis, hoc graciliter fusco-lineato; rostri carinâ ad basin conspicuè tuberculatâ.

Merops corniculatus. Lath. Ind. Orn. p. 276. no. 21. Corbi calao. Le Vaill. Ois. d'Am. et des Indes, i. p. 69. pl. 24. Knob-fronted Honey-Eater. Lath. Gen. Hist. iv. p. 161. no. 6.

Mr. Caley has the following observations on these birds. "*Friar.*—A very common bird about Paramatta, called by the natives *Coldong*'.—It repeats the words 'poor soldier' and 'four o'clock' very distinctly.—I have frequently seen three or four of them flying after a hawk, which they seemed desirous of attacking. It is a strong and sharp-clawed bird."

 MONACHUS? Trop. suprà brunnescenti-griseus, nuchà albovariegatà, subtus albidus; capite atro, nudo, sincipite plumulis albis operto; rectricibus concoloribus; rostri carinà ad basin subtuberculatà.

Merops monachus? Lath. Ind. Orn. Supp. p. xxxiv. no. 10. Knob-fronted Bee-Eater? White's Journ. pl. in p. 190. Cowled Honey-Eater? Lath. Gen. Hist. iv. p. 162. no. 7.

We have some doubt whether our bird is the same as Dr. Latham's species; or whether both may not be the young of the *Trop. corniculatus*. The specimen in our collection differs from that species by being smaller; by the top of the head being covered with short downy white feathers instead of being entirely bare; by the knob of the base of the bill being less elevated;

vated; and by the nuchal feathers being variegated with white. But these are differences which may belong to the young bird, and be lost in the adult. In such cases we can determine nothing from the mere skins. These points must be investigated on the spot. We must however observe, that the bird which we at present refer to, came from a different locality to that of *Trop. corniculatus*; having been procured by Mr. Brown on the North coast in February 1803, while Mr. Caley's specimens of the other birds were obtained in the neighbourhood of Paramatta.

Mr. Caley also observes in his Notes upon *Trop. corniculatus*, that he "never shot a specimen of the species which had white on the head, as figured in *White's Journal.*"

3. CYANOTIS. Trop. suprd olivaceo-viridis, capite nuchâque atris, jugulo pectoreque grisescenti-atris, lineâ suboculari a rictu extendente, torque occipitali, corpore subtus, rectricumque apicibus albis.

Gracula cyanotis. Lath. Ind. Orn. Supp. p. xxix. no. 5. Blue-cheeked Honey-Sucker. Lewin, Birds of New Holl. pl. 4. Graculine Honey-Eater. Lath. Gen. Hist. iv. p. 166. no. 11.

"This bird," says Mr. Caley, "is called *Bati'kin* by the natives.—Whether it is migratory or not it would be hazardous for me to say; as I have only seen it occasionally, although in different places.—I once observed several of them frequenting a tree, where they were busy in obtaining something that appeared to have exuded from a wounded part. I do not know what the substance could be, otherwise than a kind of gum of a bitter and astringent taste.

Genus.

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Genus. SERICULUS. Swains.

1. CHRYSOCEPHALUS.\* Ser. sericeo-ater; capite suprà, nuchâ, fasciâque medià alarum aureo-flavis.

Meliphaga chrysocephala. Lewin, Birds of New. Holl. pl. 6. Sericulus chrysocephalus. Swains. Zool. Journ. vol. i. p. 478. Loriot Prince-Régent. Temm. Pl. Col. 320. Golden-crowned Honey-Eater. Lath. Gen. Hist. iv. p. 184. no.38.

The actual situation of this bird in the Order of *Insessores* remains hitherto undetermined. Nothing has transpired respecting its habits or internal structure to make us either alter, or retain with any confidence, the place originally assigned it by Mr. Lewin.

Genus. MIMETA<sup>†</sup>. King.

1. VIRIDIS. Mim. olivaceo-viridis, subtus albida, nigro guttatim striata; alis caudáque nigro-fuscis, illis albido-marginatis, hâc apice albo.

\* We insert the following characters of the female of this species, which we have taken from a fine specimen in the collection of Mr. Leadbeater. A figure has been given of it by M. Duperrey, in the 20th plate of the "Voyage autour du Monde."

Fœm. brunnea, dorso pectoreque albido-lunulatis; vertice, gulæ medio, torqueque nuchali nigris; abdomine albido, brunneo-lunulato.

Frontis occipitisque plumæ pallidiori-brunneæ, in medio albido-lineatæ. Alæ brunneæ, pogoniis internis fuscis ad basin albidescentibus; subtus fuscescentes, pogoniis internis pallido-flavo marginatis. Tectrices inferiores pallidè flavæ, fusco-brunneo lunulatæ. Rectrices brunneæ, subtus subfuscæ pallidè flavescentes. Rostrum pedesque nigri. Longitudo corporis,  $10\frac{3}{4}$ ; alæ a carpo ad remigem quartam,  $5\frac{1}{2}$ ; rostri,  $1\frac{3}{20}$ ; caudæ,  $4\frac{1}{2}$ ; tarsi,  $1\frac{3}{8}$ .

A young male bird in the collection of Mr. Leadbeater, exhibits exactly the same plumage as the female, with the exception of some golden-coloured feathers appearing on the back part of the head, and the shafts of the secondary quill-feathers being of the same colour.

+ We have taken the liberty of altering the orthography of this word from *Mimetes* to *Mimeta*; the former word having been already appropriated by Mr. Brown to a genus of plants in these *Transactions* (vol. x. p. 105).

Gracula

Gracula viridis. Lath. Ind. Orn. Supp. p. xxviii. no. 2. Mimetes viridis. King, Survey of the Intertropical Coasts of Australia, vol. ii. p. 419.

Green Grakle. Lath. Gen. Hist. iii. p. 168. no. 24.

2. FLAVO-CINCTA. Mim. flavo-viridis, subtus pallidior, capite dorsoque fusco-lineatis, alis caudáque nigris viridi flavoque variegatis.

Mimetes flavo-cinctus. King, Survey, &c. vol. ii. p. 419.

The Society is indebted for this bird to Captain Philip Parker King, R.N., F.R. & L.S., who first discovered the species, and described it from this specimen. As far as can be judged from the mere  $exuvi\alpha$  of birds, where few specimens can be compared together, this bird appears a very distinct species from Mim. viridis.

- 3 MERULOIDES. Mim. suprà brunnescenti-olivacea, fusco-striata, subtus alba fusco striatim guttata; tectricibus supernis remigibusque secundariis pallido-rufo marginatis; rectricibus apice albis.
- Capitis nuchæque plumæ striis fuscis gracilibus, dorsi latioribus in medio notatæ. Tectrices inferiores rufæ, fusco-variegatæ. Rectrices fuscæ apicibus albis. Longitudo corporis,  $10\frac{3}{4}$ ; alæ a carpo ad remigem quartam,  $5\frac{7}{10}$ ; caudæ, 5; rostri ad rictum,  $1\frac{1}{5}$ , ad frontem, 1; tarsi,  $\frac{19}{20}$ .

We have already alluded to the difficulty of determining the limits of species by the skins only of birds, without the opportunity of examining the changes in their plumage from age or season in their native countries. It is of course with hesitation that we give the three foregoing species as distinct. A general similarity in the disposition of their colours prevails throughout the

the group, as is indeed usually the case in what are called natural genera. But a decided difference in the colours themselves is exhibited in these three alleged species; and it is our custom to keep all such apparent species distinct until they are proved to be the same. Many mistakes will without doubt arise by an adherence to such a rule. But these mistakes are easily acknowledged and retrieved when proved to be such. When we cannot represent Nature as she is, we must endeavour to represent her as she appears to be. If we suspend our observations in apprehension of committing an error, we shall soon cease to represent her at all.

As to the group itself, it is not in our power to add any information to that which Captain King has given in the Appendix to his "Survey."—The following extract from Mr. Caley's MSS. contains all the knowledge we have of these birds. He speaks undecidedly; but what he says is against the opinion that they are *meliphagous*. "These are birds of passage. I think I once saw a flock of them in Government Garden, and that the gardener complained of their destroying the figs. One of my specimens, to the best of my recollection, I shot in a green wattle-tree close to Government House."

## Genus. Psophodes\*.

- Rostrum forte, breve, subrectum, subcompressum; culmine vix carinato, subarcuato; mandibulis integris; naribus basalibus, ovalibus, plumulis setisque frontis opertis; rictu vibrissis fortibus incumbentibus instructo.
- Alæ brevissimæ, rotundatæ ; remigibus primå brevi, secundå tertiå et quartå gradatim longioribus, quintå ad nonam inclusam ferè æqualibus, longissimis.

Cauda elongata, gradata.

\* ¥opos crepitus.

Pedes

Pedes subfortes, subelongati; acrotarsiis scutellatis, paratarsiis integris.

This form offers one of the greatest difficulties to the investigator of affinities. The birds that exhibit it are said to be Honey-Eaters. This we much doubt. They are found among the flowers of the Eucalypti; but this circumstance may arise as well from their being in search of the insects abounding in these flowers, as of the honey contained in them. It is strange that we have never been able to examine a tongue of these birds, although the skins are common. Their general appearance indicates much of the Shrike. The strong bristles of the rictus suggest the idea of their food being animal, and indeed originally induced Dr. Latham to place them with the Linnean Muscicapæ. The integrity of the margins of the bill, on the other hand, seems to militate against this supposition. The extreme shortness and roundness of the wing again, and the long and graduated tail, are additional characters that demand consideration. In these characters, as well as in the length and softness of the feathers on the back, they approach the long-tailed American Thamnophili. On the whole these birds form an interesting object of research to the naturalist, who may have the opportunity of determining their exact station in the Order, by observation of their habits and characters in their native country. Until these points are ascertained, we leave them at the extremity of this family, to which they are usually referred.

1. CREPITANS. Psoph. olivaceo-brunneus, subvirescens; capite cristato, jugulo pectoreque nigris; tæniå latå utrinque sub oculos, rectricumque apicibus albis; abdomine albo-variegato, femoribus rufescentibus.

Muscicapa crepitans. Lath. Ind. Orn. Supp. p. li. no. 10. Coach-whip Honey-Eater. Id. Gen. Hist. iv. p. 187. no. 43. VOL. XV. 2 U Mr.

Mr. Caley informs us that "this bird is more often heard than seen. It inhabits brushes. The loud cracking whip-like noise it makes (from whence the colonists give it the name of *Coach-whip*) may be heard from a great distance."

Genus. POMATORHINUS. Horsf. in Linn. Trans.

- TEMPORALIS. Pom. cineraceo-fuscus, subtus fulvescenti-fuscus; fronte, temporibus, gutture, pectoreque albis; tæniâ gracili super alterâque subtus oculos, caudâque nigris, hâc apice albido.
- Caput in medio pallidè fuscum, fronte, temporibusque albis. Remiges externè pallidè fuscæ, ad apicem saturatiores. Tectrices inferiores pallidè ferrugineo-fuscæ. Rectrices nigræ, omnes, mediis exceptis, ad apicem albæ. Rostrum nigrum, ad frontem albescens. Pedes nigri. Longitudo corporis, 10¼; alæ a carpo ad remigem quartam, 4½; caudæ, 4⅓; rostri ad frontem, 1⅔0, ad rictum, 1⅓; tarsi, 1⅓70.

Dusky Bee-Eater. Lath. Gen. Hist. iv. p. 146. no. 31.

This species was found by Mr. Brown at Shoalwater Bay, August 1802.

- 2. SUPERCILIOSUS. Pom. brunnescenti-fuscus; tæniå superciliari ad nucham extendente, gulå, pectore, abdomine anteriori, caudáque apice albis.
- Frons, loraque nigro-notatæ. Remiges fuscæ, subtus pallidiores. Tectrices inferiores pallidè brunnescenti-fuscæ. Abdomen imum crissumque brunneo-fusca. Rectrices brunneo-nigræ, omnes, mediis exceptis, ad apicem albæ. Rostrum pedesque nigri. Longitudo corporis,  $7\frac{7}{10}$ ; alæ a carpo ad remigem quartam,  $3\frac{7}{10}$ ; caudæ,  $3\frac{1}{2}$ ; rostri ad frontem,  $\frac{19}{20}$ , ad rictum,  $1\frac{1}{20}$ ; tarsi,  $1\frac{1}{10}$ .

This

This bird was procured by Mr. Brown on the South coast of New Holland in 1802.

These two species very closely accord with the Javanese spccies of Pomatorhinus, P. montanus, described in these Transactions. The short and rounded wings, the somewhat lengthened and rounded tail, and the elevated tarsi, at once point out the affinity. The bills of the New Holland birds are not so much arcuated as those of the Javanese; nor is the developement of the nares so conspicuous. But the general accordance is so great, that we feel no hesitation, in the present imperfect state of our information at least, in referring all these species to the same group. The structure of the tongue of these birds, as well as the nature of their food, is as yet unknown : and as they evince in some points a very striking accordance with the scansorial family of Certhiada, we have some doubts whether they may not be more justly referred to that group than to the Meliphagidæ. Their nares, on the other hand, indicate an affinity to the latter family, where we leave them provisionally for the present. To whichever of the two groups they will eventually be ascertained to belong, they will be found, we make no doubt, to stand at the extremity of it, and to form the passage to the other.

(End of Part I.)

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X. Notice